THE

AMERICAN FARMER,

"O FORTUNATOS NIMIUM SUA SI BONA NORINT
"AGRICOLAS." . . . . . *Virg.*

VOL. XIV. BALTIMORE, MAY, 1859. No. 11.

MAY.

"Now the bright morning star, day's harbinger,
Comes dancing from the east, and leads with her
The flowery May, who from her green lap throws
The yellow cowslip, and the pale primrose."

The beautiful Spring season, the "May day" of another year revisits us. The earth so lately stark and cold in death, puts on her glorious apparel. Her robes of freshest green, her bosom decked with violet and primrose, her brow crowned with roses and myrtles, she has arisen to a new life, and stands arrayed as a bride to meet her lord; picturing to us faintly and darkly the glories of that "New Earth" which we look for.

It is the annual proclamation of the new life, which is promised us; the earth preaching its annual sermon of the Resurrection. It is nature's yearly celebration of the great Easter Festival. And while the Faithful throughout the world, join in general acclaim "The Lord is Risen," every blade of grass or grain that springs, every bud that unfolds itself, every simple flower that blooms, every blossom that waves in the breeze, every bee that hums or bird that rings out its joyful melody responds, *"The Lord is Risen Indeed."*

WORK FOR THE MONTH.

CORN PLANTING.

The preparation of the corn ground will now be pushed on as urgently as possible. Bear in mind the necessity of closer planting than is usual, to give you a full crop of corn. While five feet square will give about 1700 hills, four feet each way will give 2700 and three and a half feet each way, more than 3700 hills. With manure enough and proper working, this number will grow as well without firing and burning as that first named. But you must not put off working it until July. You cannot go with plough or cultivator into corn six to eight feet high —the roots branching through every inch of the soil, without doing it irreparable damage. We say therefore again work your corn before it is planted, and work it immediately after it is planted, plant closely, and "lay by" early, if you expect to make a full crop.

Get on quickly now with the planting—rolling the dry corn in tar till each grain is coated slightly, and sprinkling with gypsum or dry ashes to separate the grains.

TOBACCO.

Get rid of your old crop of Tobacco immediately after corn-planting if possible.

Give strict attention to plant beds, keeping them clear of grass, and top-dressing frequently. After corn-planting, give a portion of tobacco ground a second ploughing, and be ready for your plants as they get size for setting out. Do not be in a hurry to set out small plants, but it is very bad management to lose a "season" by failure to have the ground in readiness.

CLOVER FIELDS.

If you wish the land to have the benefit of the clover crop, be not tempted to turn in the stock until it comes into bloom. The greatest benefit to the soil is obtained, by turning into the field when in full bloom, stock enough to trample quickly much the greater portion of it to the ground. If the clover is to be cut for hay, it is not thought to be sufficiently matured until about half of the blossoms have turned brown.

POTATOES.

This crop is constantly growing in importance. As to kind, we should plant always a good variety of white potatoe. We have not yet met with a yel low potatoe that any animal above a hog should eat, and it is amazing to see the variety of miserable roots with which the market is glutted, called potatoes. For the main crop, the Peach Blow stands high as to quality and productiveness. The Foxite (white) we know by experience to be excellent in

quality, and much more productive than the Mercer. The Mercer is an old favourite as to quality' but a poor producer. There are several other varieties, which are highly spoken of north of us by their several advocates, as the Prince Albert and the Buck-eye, which have not been tested with us. The Carter though a good potatoe has declined in popularity.

The crop should be planted on a rich well turned sod, if it can be had; though any well worked, well manured ground will do. Where rot is feared, it is very desirable we think to manure the sod sufficiently in the Fall by top-dressing, and to apply only a moderate dressing of ashes and plaster at the time of planting. We are in the habit however of using all sorts of manures with success in immediate connexion with the plantings. Peruvian Guano is very good, put in the drills at planting. Stable and other long manures, we put on top of the plantings before covering. It acts as a mulch, and what is very important to this crop, preserves a uniform temperature.

Time of Planting.—Much difference of opinion exists as to the time of planting potatoes for the main or late crop. The almost universal recommendation of the Agricultural Journals is to plant early. As early even as April and the beginning of May.—It is supposed that the early planting exempts the crop in a measure from the liability to rot. We doubt very much the correctness of this theory, and think it should not be considered in determining the question. Our droughts are most likely to take place between the middle of June and the middle of August. It is no advantage to the crop to have the tubers forming at any time during this period. If it begins to bloom by the middle of August there will be time enough to mature in this latitude, and the growth of the tuber will be going on during a period when the temperature of the earth will be more congenial, and when they will be most likely to have sufficient moisture. One of the largest crops we have ever made was in a season which was very unusually dry until a fine rain came on the 16th of September. With a remarkably flourishiug growth of vines, there was not a tuber formed until this rain occurred. Our experience was the same in the past year with a crop planted in July and just out of the ground by the first of August. We never made a better crop. Our opinion of the time of planting is, that the middle of June is soon enough, and we should not plant earlier unless as a matter of special convenience. Other suggestions to be observed to ensure the coming up of the crop we defer till next month.

SWEET POTATOES.

Sweet potatoe plantings will be coming on during the month, and should be planted in accordance with the excellent directions of our correspondent last month.

ROOT CROPS.

All root crops except turnips should be got in the ground this month or early in June. The sugar beet and mangold wurtzel bear transplanting as well as cabbages, and it may be a convenience to avail yourself of this fact.

PUMPKINS, CYMBLINS, &C.

These crops should be planted during the month.

HUNGARIAN GRASS—HONEY BLADE.

We have numerous enquiries about this crop, our friends forgetting that we have given all the requisite information some months past about the Hungarian. The "Honey Blade" claims to be a superior kind of Hungarian Grass, and the seed is sold at a *very superior* price. And the Hungarian claims to be better than the old fashioned German millet. They are all good for those who want an addition to their stock of Hay at short notice. They will give a crop if the season be favourable in sixty days after the sowing of the seed; and yield twice as much as timothy from land of the same quality.—There should be half bushel of seed to make fine hay—a peck is enough to give a full crop of seed. It is an exhausting crop, and should be put on in well manured and well prepared land. It leaves the ground clean and in good order for fall seeding.—The first of June is time enough to sow, and any time during that month.

SUGAR MILLET.

After the middle of the month is time enough for this crop. It is a delicate plant when young, but strong and vigorous when it advances a little.—Plant in drills 3½ to 4 feet apart and thin to 12 inches distance in the drill. A small lot of it convenient to the hog pasture will be valuable for their use in the months of August and September.

FIELD PEAS.

The field pea for whatever purpose should be got in the ground by the last of the month or early in June. Our opinion of its value as a fertilizer, has been very often given. If intended for this purpose, sow 1½ or 2 bushels per acre after the middle of the month. Should there be a scant supply of seed it would not be amiss to mix one-third or one-half the quantity of Indian corn with it—sowing all together and ploughing under with a light furrow after the grass is well started upon the ground. A small lot of these peas would be a valuable auxiliary in feeding your hogs, in the Fall; and at any rate, raise enough in the corn field for family use, and for seed next year, should you want them.

SHEEP SHEARING.

Sheep Shearing should be attended to in due time, to avoid loss of fleece, and to relieve the animal from the oppressive covering as warm weather advances. It is made a question now as to washing

the fleece on the back of the sheep, whether it is not attended with much more injury to the flock, than advantage to the fleece. Give careful attention in shearing, to prevent clipping and gashing the flesh, as well as to have the wool neatly and carefully taken off.

FALLING OFF IN SUPPLY OF BREADSTUFFS—AGRICULTURAL COLLEGES—PUBLIC LANDS.

WHEATLAND, DEL., April 11, 1859.

To the Editors of the American Farmer:

You ask, in a postscript of April number of the current volume of the American Farmer, if I would give instructions as to the disposition of an article on the best way of investing the fund arising from the land sale, written whilst the Agricultural College and Experimental Farm Bill was in the hands of the President; you closed by asking what you should do with the article.

In answer I will say, that I have written and talked so much on that subject throughout the West, and indeed in almost every section of the country where I have been, that I have forgotten what I wrote in the article referred to. But I now say *let that slide;* as the Farmers of the United States should, all Presidents who care so little for the interests of the great mass of farmers who elected them to office, or who are so silly as to suppose that the government will ever derive $6,000,000 from the sales of the public lands, or even one red cent more than it will require to survey and sell them; without taking into the calculation the cost of keeping the Border ruffians, who are worse than savages, from encroaching upon the Indians, with the view of raising a war cry against the poor Indians, and in turn, heavy war bills, such as that recently presented by Oregon to Congress.

The Editor of the American Farmer says, that he was not disappointed at the President's veto. I must confess that I was, but I am glad that he did it. Because the quantity of land asked for was entirely too small to be of any account for the purpose intended. And it will give me an opportunity, if I am able to attend the United States Agricultural Society at Washington next winter, to renew my movement for a grant equal to 500,000 acres for each State now of the Union, and the same amount to all other States that may come into the Confederacy, to be divided amongst the States according to Federal Representation; say 20,000,000 acres for a start, for the present States and Territories, to be increased in the same ratio as new States and Territories are admitted—or, $25,000,000, the equivalent in money, equal to $1.25 per acre. The interest upon which would only be $1,500,000 per annum, to be divided amongst the States, according to Federal Representation, as before said.

In this movement every Agricultural Society, and every other Society, and class of men, should join. For what interest is of such importance to mankind as the cheapening of breadstuffs and provisions for the million. And besides, if grants of the public lands cannot be obtained for such an important object, in which all are more interested than for all other subjects—then the old States may give up all hope of ever receiving any benefit from the sales of the so called public domain.

It is now a lamentable fact known or supposed by but few, but nevertheless too true, that the production of breadstuffs has greatly fallen off in proportion to population, as a comparison of the census reports of 1840 with 1850 will show. Thus five of the New England States which in 1840 produced 1,489,320 bushels of wheat, fell off in 1850 to 554,984 bushels, showing a falling off of 934,336 bushels. New York, by her State statistics shows a falling off from 13,121,498 in 1850 to 9,092,402 bushels in 1855. Ohio in 1840 produced 16,571,661, fell off in 1850 to 14,499,350 bushels, shows a falling off of 2,084,000 bushels. Five of the Southern States, Georgia, Alabama, Mississippi, Tennessee and Kentucky, which produced together, 13,189,952 bushels of wheat in 1840, fell off in 1850 to 5,370,751 bushels. Indeed no State or field, after 10 years successive cultivation had increased in the production of breadstuffs—*on the population*, except Delaware, New Jersey and Maryland, and they only by improved cultivation and a greatly extended use of lime, guano and other concentrated fertilizers, far above the profits to justify such an outlay. All this falling off is mainly attributable to an exhausting course of cultivation, and the increased number of enemies to the wheat crop; the *greatest of which in this is nameless*, but amongst which are the Hessian Fly, Joint Worm, Red Weevil, Blight and Fungi, and many other causes not known to the most experienced farmers.

What we want is, for the Government to lend its aid in making experiments for the benefit of agriculture, which cannot be made by private enterprise. The depth of cultivation, whether it is but to plough shallow, as we have been doing for the last one hundred and fifty years, or to trench, plough, subsoil, or under-drain or how to combine all on the same farm as best adapted to the soils as found; the time and manner of planting, for the state of the weather, is yet but imperfectly understood. All have seen that a few days difference of time and state of the weather in planting, often show marked difference in value of crops. Much also is yet to be learned as to the time and state of the grain, when and how it is to be harvested and secured, (and there appears to be a great a want of knowledge as to who we shall sell our grain and products of our farms to.) My plan is to *make* a home market for it.

It cannot, it must not be expected that those experiments and others countless in extent, can or will be made as they should be, by individual enterprise, even by the most zealous in the cause of Agriculture. Those necessary experiments to the increasing of our crops to the wants of our increasing population, can only be made by establishing Agricultural Schools, and Experimental Farms. And as *all the people* are interested, *all* the people should assist, in the consummation of so desirable an end—and how can that end be so easily attained as by the plan proposed. That is to DEMAND such an appropriation of the public domain, as will secure the object, whether it be 20,000,000 acres, or 200,000,000 acres. Much more than this latter amount has been given away to the new States within the past ten years, and that too, in many cases for objects of doubtful utility. The single State of Arkansas, with a population in 1850 of only two hundred and sixty-two thousand, has had grants of land under different heads of appropriations, to over 20,000,000 acres, and what is still worse, by the *silent, insidious, ras-*

cally, thieving operations of the graduation bill, so called, by which all the lands are ordered to be sold which lie within the limits of any new State, as soon after such State is admitted into the Union as possible. The consequence is, that in the short space of about thirty years all the land lying within the bounds of any such new State is liable to be taken up at twelve and a half cents per acre—by the course of such graduation; whether such lands are wanted for cultivation or not, or indeed, whether the fiftieth part of such lands are wanted for cultivation, and without regard to the increase of their population. In the States of Arkansas and Florida, neither their products or population had increased but little within the time of taking the two last censuses, and yet they have each had grants of over 20,000,000 acres, under different heads of appropriation, equal to the amount I expect to ask for at the hands of the next Congress for Agricultural Schools and Experimental Farms, and they too have a full share of that for the purposes therein named.

The public domain is being fast frittered away, without any corresponding benefit to the Treasury of the United States, or to the increased production of breadstuffs or provisions, or of what was seemingly intended by those wasteful appropriations. For although the plea for those grants was cheap homesteads for the poor settlers, yet they are at once taken up by wealthy speculators and the price raised above the settler and they are bound to become tenants, as in the old States from whence they went.

The products from the sales of the public lands in the fiscal year of 1857, was only $3,361,471; in the first half of that year; $1,700,633 was received; of that amount $533,121, was received from Missouri, $232,669, from Illinois and $215,090 from Minnesota, making together from these three States $980,881, whilst the receipts of the other fifteen States amounted to only $719,752. The receipts of the second half of 1857 was $1,660,840, of which $467,481 was received from Missouri and $415,650 from the State of Iowa, making the receipts from those two States $885,131, whilst the amount of sales in the other 16 States and Territories amounted to only $778,659.

Nor can we expect the receipts into the public Treasury from the sales of the public lands ever to much exceed that of 1857; when it is known that by the graduation law, all lands remaining after being once passed over as sold for thirty years, may be taken up at 12½ per acre, and that the holders of all the recently granted lands for different purposes to the amount of over 356,000,000 acres, and that nearest to the settlements, come into the market in competition with those of the government.

But what most interests us on the subject of Schools and Experimental Farms is the fact that in 1850, the amount of all lands under cultivation was put down at 118,457,622 acres, and the amount held by individuals under the head of unimproved lands amounted to 184,621,348 amounting together to 303,078,970 acres, whilst our population was 23,191,876. We that year produced 100,485,844 bushels of wheat of the value of $90,437,260 being produced at 90 cents per acre, whilst now with a population not estimated at more than 30,000,000, of inhabitants, or say about 30 per cent. over that of 1850. We have in private hands, farmers and others 360,000,000 acres of land above the 303,078,970 acres, making together 663,078,970 acres in and for cultivation, and yet the price of wheat is this day $1.54 to $1.55 per bushel. This increased price is not because of scarcity from foreign demand or increased home consumption. Indeed we are now importing largely from Canada and considerably from Europe, whilst hundreds of thousands of the operatives, who were at work at fair wages in the early part of 1857 have since been thrown idle, or from their accustomed trades and been compelled to become farm hands in turn for subsistence, and yet with all this there is an alarming falling off in the production of breadstuffs, provisions and live-stock.

The above facts, as set forth, do seem to me to be of such an alarming extent as to require a thought from Philanthropists, Agriculturists and Statists if not from Presidents and Politicians generally. These thoughts are written off as they have occurred while whiling away a wet morning; without re-writing or scarcely a second reading—you can take them for what they are worth, and if you can fix them up, so as to be worthy a place in your widely circulated old Farmer, why do so, but if not, do not. JOHN JONES.

MATTERS AND THINGS GENERALLY.

BY PATUXENT PLANTER.

MESSRS. EDITORS:—I congratulate the farmers upon the rather spicy controversy which, of late, has given agreeable animation, and afforded useful information to your colums, in regard to *Devon cattle* and the different *breeds of Sheep*. As a breeder on a small scale of, what I term, thorough-bred and remunerating stock, I take great pleasure in seeing these searching articles. It does much good—it revives the good old times when Col's Capron and Carey entered the lists as stalwart, courteous champions of antagonistic systems for the "*renovation of worn out soils;*" and who each did his part so well, that when the contest ended, neither was worsted, but the public greatly benefitted. And such would be the result of the present discussions if they be carried on without asperity. It is proper that a scrutiny should be exercised in regard to all animals claiming to be pure-bred, and will be most generally responded to with cheerfulness by the owners, if the screw be not applied too *tight*, and no screw *loose* about *them*. I am an admirer of the settled principles of the "Old Dominion,"—that in politics all pedigrees and aristocratic connections are to be eschewed, and the merit of the individual alone to be looked to; but in *domestic* affairs and *breeding generally*, none but "thorough-bred" properly "*belong to the first-families.*"—Upon this rule I have acted in breeding Devons, looking, as your able correspondent, Mr. Pendleton, justly remarks, solely to no one quality, but to their adaptedness for work, beef and milking. This should be the true standard rule with breeders. If one wishes to establish a pure dairy-breed, he never would breed pure Devons, but a mixed breed of Alderney, Ayrshire, Durham, and thin-necked, Guenon-marked Devon. Out of this medley I should not wonder that in a series of years, with the exercise of a sound discretion and an unfaltering determination in the one sole di-

rection, a Collins or a Lord Leicester would be able to originate a pure dairy-breed, which, after a course of time and fair trial, would be entitled to a "herd-book" as well as the Durham and Devon. Among Racers, no animal is considered "thorough-bred," who does not trace through all his ancestors back to a Barb or an Arab. If it has a single flaw it is looked on only as a *full-blood*. Why should not a similar rule be held good by breeders of horned cattle? In my observation and experience, I have seen a slight cross of Durham, or good common stock on the pure Devon, improve greatly the form of beauty, and increase the size, and yet not altering the general character of the animal in colour or configuration so much as that the cross could be discovered by the closest scrutiny of the most practiced eye.

I have had—when I commenced breeding Devons, and had other herds on my farm, (now I have none that do not trace back without a flaw to Patterson's stock, or the *next best* imported stock, Consul, &c.)—calves that were about one-quarter common, that were more perfect and more beautiful than the pure Devon, and could not be distinguished as to the purity of their blood by their looks; and if I had not known that they did not belong *to the first-family*, should have preferred them. The next generation or the next, would have undeceived me, for "blood will tell" sooner or later, for the Devon cattle are so distinctly marked a race, one would be justified in believing that their common ancestors were the bull and cow Noah took aboard his Ark. If there be a flaw or mishap in any one of the family, however slight, it may vary from their own peculiar blood, if you give time enough it will come out.

As to the sheep case, wherein the *Merinos* are Plaintiffs vs. Cotswolds, defendants, lately submitted upon the evidence and elaborate written arguments of their able and distinguished counsel, to you, as judge, and to we farmers and breeders of sheep, as the jury. I, one of that jury, beg to say a few words in justification of not coming at once to a verdict, and thus settling the case.—There are several points involved, and looking to the evidence and the eminent counsel, each as an oracle over some points, I am inclined to one side and then to the other, as I am in an undecided state. Thus, upon the *meat* or *eating* point, I incline in favour of the Merino; for I am assured the Editor is more epicurean in his tastes than my friend, the abstemious Col. And on the question of respective profit for the shambles the Col's. figures, and arguments are like a battery of heavy guns, they demolish all opposition. As to the *wool* point, I am uncertain how to determine, but rather incline to the greater experience, well-known caution and cool, exact calculations of the Col., than to the ardent zeal of the friend of the short-wools who must, necessarily, have a limited *practical* experience. Although I know personally that his long and ardent love of agriculture, has induced him to read much upon the subject, and he has thereby acquired a valuable stock of information, to add to the many other treasures of his well-stored mind. As to the point he makes, that the same amount of food will keep two Merinos to one Cotswold, I think him right; but would ask—will the same cost of keep, produce in profit from the wool and meat of two Merinos, as much as from one Cotswold per year?

As to the bill of mortality in the two families, I am doubtful which to think is the most free from the scythe of the old man. It depends, I would suppose, on locality, seasons and general comfort and attendance upon them; but, I think, if I were compelled to be born a lamb on the snow in freezing time, I should prefer to be covered with long wool, rather than the fine, short, silky down of the Merino. In regard to form and beauty, it is well for humanity and "the rest of mankind," that beauty is an idea every man sets up for himself, therefore much allowance should be made for every man's taste; and a good maxim for farmers is, also, "that pretty is that pretty does," but yet some sacrifice should be made for the beautiful. Many faults are excused, and much cost has to be and should be made for beauty.—This, my private opinion and action toward *all* orders and classes of animals. I say all this to preface the opinion, (rather too decided, perhaps, for an *impartial* juror,) that I really can see no beauty in a Merino, and think the Merino ram next to a short-tail monkey—the ugliest object in nature I have ever met in my perambulations.

To be brief, your Honor will see at once that for these few reasons among many others, that I, with other jurors, are unable to make up our minds as to the verdict in the present state of the case. The only way that I see a proper verdict and righteous judgment can be arrived at, is for us to take the proper time and means. The time we have under our own control; the means can be supplied by the disputants. I suggest a juror be considered withdrawn and the cause continued until further light be thrown on the subject. The parties furnish the *means* and we will obtain the *light*, in this wise: You and myself be furnished by the respective parties, with a promising young male and female of the family of the respective contestants, and we will give to each what comforts and accommodation they may want; we to have control and ownership over and in them until we are satisfied to make a decisive report upon their respective claims. It will enable us to study the habits and characters of these two contending races. We shall then be able to see which are more liable to disease, accident or abduction by man or dog. To study their habits, whether they are lazy, sluggish, costly to keep, because requiring rich and much food, luxurious, requiring great attention, disposed to obesity, quiet, not given to rambling and breaking bounds, or learn from observation, which are most inclined to be healthy, less noticed by thieves or dogs, active, requiring little care, regardless of luxurious living, satisfied with a little, and that coarse fare, restless and creeping through every hole they can find, quarrelsome, never fat but lean—and further use can judge of their traits as being fruitful and tender mothers and nurses. Better than all, we could ascertain, to a certainty, their relative abilities and dispositions in supporting the humane principle of *clothing* the naked and *feeding* the hungry. I think you will agree with me, this is a sensible suggestion. I hope the discussion may continue. Whatever the Col. writes on sheep husbandry is always highly interesting and instructive; and I rejoice to see Mr. W. wielding his pen so energetically in behalf of agriculture, for with his love of the pursuit, his zeal and intelligence, he must succeed in farming, and I hope become a *planet* in the agricultural sphere, as he already is a *Star* editor.

AGRICULTURAL MACHINERY.

Baltimore holds a deservedly high position among her sister cities, but in nothing more does she equal or excel them, than in her many and enlightened mechanics, particularly those engaged in the manufacturing and selling of agricultural implements. The old, respectable, and deservedly popular house of Sinclair & Co.; and the palatial depot of Whitman & Co., and others, reflect a credit upon the city and State, and are known and appreciated throughout the Union. To these, with pleasure, I see added to the list of dealers in agricultural machinery, implements and seeds, the name of our young friend, Richard Cromwell, who has a fine establishment on Light street, and is well worthy of encouragement by our planters and farmers, and by all who wish to second the advancement of the young, enterprising, attentive and trust-worthy—such, I feel sure, all who may patronize him will find him to be.

CORK-OAK

Is a pretty evergreen, and will make a beautiful ornament, I am sure. Two years ago I planted some acorns, and have one now, in an exposed situation, which is 18 inches high. It needs no protection, but grows slowly—has small green leaves something like the holly.

THE PECAN NUT.

I should like to get some of those fast-growing ones of our friend Jones; for, ten years ago, I bought one from a nurseryman, and planted it in a favourable spot, and have bestowed on it much attention, but it does not grow two inches a year in height. At that rate, I shall be older than the Major is when I eat of its fruit.

Talking of trees, I am inclined to say to your fair friends, if they wish to see a beautiful sight, let them plant, alternately in a border or in a clump, six or eight feet apart, Pyrus Japonica and the yellow flowered Berberry; they are brilliant, profuse, and early bloomers, and remain a long time in bloom.

For the American Farmer.

MUTTON AND WOOL.

Two years ago I challenged the United States to a comparison of the profits of coarse and fine wool sheep, through the pages of the "Northern Farmer." I see from your pages, that the fine wool, or Merino sheep, is advocated by the Editor of the Washington Evening Star, writing from Culpeper county, Va. The old English adage of "consult your land before you buy your sheep," is a good one, for it is true that lean sheep and kine are best adapted to lean soil; and there can be no doubt but the little wool-bearing animal called the Merino, where the herbage is scant and climate vigorous, is the very institution; but to pretend to contrast him with the stately Cotswold seems to me very much like the efforts of the carpenter to bore a two-inch hole with a gimlet. There is no comparison between the two races of sheep in any region where grass and grain are to be converted into marketable commodities. The growth of fine wool barely keeps soul and body together, at any price it has ever yet commanded; and if you have any soil, or are located where your land has any commercial value, it will never pay. Upon poor, thin soils, of little value, where manure is of vital importance, they are doubtless well adapted, from their extremely small carcass and hardiness. In such locations the wool will pay, perhaps, for the cost of rearing, and their manure be a clear profit, enabling the proprietor to bring his land up to such a state of fertility as to admit of the introduction of the long, coarse woolled English sheep, in which there is a profit. I state, and am prepared to maintain by actual test, that no *wool*-bearing animal can compare in flavour with those producing *hair*, the secretions necessary to grow wool being incompatible with those fine flavours in the essence of meats so grateful to the palate of *man*. Hence we find, that *Americans, nationally*, are not a mutton-eating people, and it is attributable to the fact, that very few ever have had the opportunity. Our customers have been supplied with the carcass of the small wool-bearing animal under the *appellation of mutton*, and from that, their tastes have been formed. The sheep has heretofore been grown with an eye to the value of the fleece alone, and the finer the wool the greater the profit; and, when worn out as a wool grower, he finds his way to our cities, is slaughtered, and his carcass called mutton—and such mutton! The guest need never to inquire at a hotel of a waiter if he has mutton, nor consult the bill of fare—his olfactories will make the announcement the moment he enters the dining hall. The result of serving up such stuff, and calling it mutton, has resulted in repelling its consumption by our people to such an extent, that a majority do not use the article. Its consumption had run down so low, and the price, of course, along with it, under the exclusive administration of our fine wool growers, that mutton ranked at least 50 per cent. below the average price of beef; and tens of thousands of these little, rank-flavoured, worthless, worn out animals yearly found their way to the wholesale slaughter-house, when they were killed by the legion for the pittance of tallow they might yield, and their pelts. And such, to this day, is the fate of nine-tenths of the sheep discarded by the wool grower for, and on account of, age. Not one in ten after being exhausted as a wool grower ever gets to be fit for the butcher's shambles; but the tallow vat is his fate, where his whole carcass is subjected to the action of steam and a severe pressure for the mite of tallow so beautifully commingling with the lean, as described by your Culpeper friend.

But a new era has dawned upon America, a new order of things is about being established by the American mutton growers. Here, and there, and almost every where in the United States, the effort to introduce the true mutton sheep from Great Britain has been begun, and its inauguration has already began to revolutionize the public taste. Already has this mutton and its crosses elevated the character, and with it, the price of our mutton. The Cotswold, Liecestershire, and Down mutton, and their crosses on our native sheep free from the taint of fine wool, will now command, and has for some three years past in New York, from one to three cents more per pound than the very prime, choice, corn fed beef; and if our sheep growers will continue to grow this fine mutton, its consumption will increase with its growth, until we will become a mutton-eating nation, just as the English now are.

Much as we hear of John Bull and his beef, and there is no question but he is entitled to the ap-

pellation of a beef eating nation, yet the statistics will show that the consumption and growth of mutton in Great Britain exceeds that of beef. But the reader must bear in mind she *imports* her fine wool and does not *grow it*. The Cotswold sheep does not, critically speaking, grow *wool*; but *hair*. It will not felt nor full, and cannot be made into a fulled cloth at all. It has its appropriate use however. For flannels and blankets, delaines and serges, &c., it is of great value. In England it brings about twenty-five cents per pound on an average of years; here in America, about the same. It is not grown in sufficient quantity to supply the home demand. The average value of a good Cotswold flock in wool, will equal that of the finest Merino; what it lacks in value per pound it will gain in weight: and a given amount of food will make a greater return in money value of wool and carcass if fed to Cotswolds, than if fed to Merinos; provided both races are put on full feed. The intelligent agriculturist should, in the selection of his stock for profit, always ascertain the animal that will pay *the greatest profit* on the *food consumed*; and not that animal, or race of animals, that will endure *starvation* the best. Food is the capital of the farmer, and his study should be how to expend it to the greatest profit. The average weight of fleece from pure Cotswolds will treble the average weights of Merinos (if fine.) The average price, however, of really fine Merino wool is about twice that of the Cotswold.

The revolution going on in Great Britain, to which your correspondent alludes, in the consumption of mutton is true. The Cotswolds grow to a great size, and grow too fat for the taste of many; hence the resort to smaller breeds, to supply this demand of the aristocracy; for, bear in mind, this change has not decreased the supply or demand for the Cotswold mutton, for it is consumed in England by the labouring men of that country just as the sides of the hog in this country. Many years ago plain cured bacon hams in our market were always higher in price than the sides or middlings; now, in the Cincinnati market, frequently clear sides will bring more per pound than plain hams, for the reason that the consumption of the ham is more limited than formerly—all labouring men buying their meats preferring good, sound bacon sides to the hams. A limited amount only, fancy cured and expensively cured with sugar, will now command any thing extra. The aristocracy of England, I repeat, are preferring a smaller and leaner joint of mutton to the larger and fatter, and hence the Welsh Runt and the South Down are demanded; but the reader must again bear in mind, that neither the Welsh Runt, South Down, or any other English sheep, is a fine woolled one. They are not really a wool bearing race. Although finer in fibre than the Cotswold, it would cut a sorry figure with fine Saxon, Silesian, or Merino wools. Their want of fattening qualities, as compared to the Cotswold, make their production more costly; and they could not compete with the Cotswold for any thing, except that the aristocracy pay aristocratic prices for a limited number of them.

The large Cotswold sheep will go out of fashion in England, when clear bacon sides go out of fashion in Virginia and Maryland, and then we will endeavour to grow a hog all ham. The mission of the fine wool sheep is to grow fine wool, an article that never will be dispensed with. And whenever the wool grower has the arrogance to invade the precincts of the true mutton races, and propose his sooty and kinky little hard feeding biped as a rival for our tables, it is high time that his fallacies should be exposed to the discerning of the tillers of our soil.

ANTHONY KILLGORE.

Fernleaf P. O., Mason Co., Ky., April 9th, 1859.

BLIND DITCHING.

CULPEPER CO. VA., April 1st, 1859.

To the Editors of the American Farmer:

DEAR SIRS:—Hoping by this to make some return, (however slight it may be,) for the vast amount of information received from many of your other subscribers, and not wishing to be a drone in our great agricultural hive, of which the "Farmer" occupies the place of *queen* bee, I have attempted a slight treatise on the subject of "Blind Ditches." I will give you not only your humble servant's ideas, but also those of Mr. John Q. Hewlett, on the subject, as practised by that gentleman during the time of my tuition with him; for, as you know, he was my instructor in what pertains to farming. Whilst residing with Mr. Hewlett, I saw a good deal of "blind ditching" put down; and since I left him I have had some experience of my own. The following is the plan which I have adopted with success, after failing in several others. I have the trench dug on the border of the low ground, or around the foot of the hill, (in other words,) in so doing, I cut off the supply of water which almost invariably comes out of the higher ground. The trench should be full three feet deep and three wide at the top sloping to one foot at the bottom. The stiff clay taken from the bottom should be put one side of the ditch to itself. The stone should then be hauled along the bank; an ordinary cart load will make from eight to ten feet of ditch. The flint rock is best, not being so liable to crumble from the action of the water. The stone should be about the size of a hen's egg—not larger, and should be thrown loosely into the ditch to the depth of one foot; a layer of brush should then be put on the stone—cedar brush will last longer than any other, but pine will answer, or corn-stalks at a pinch, but not wheat straw, for that decays before the earth becomes compact. Covering the stone is perhaps the most important part of the ditching process, for if the stone is not thoroughly covered, the dirt will get between the stones and effectually stop the water. After the brush is put in I make my hands stand in the trench so as to keep the brush in place whilst filling in the dirt; this can be done better with a hoe than anything else, as the hand can draw the dirt into the ditch without changing his position. The clay which, by exposure to the sun, has become baked, should be put in first, for being lumpy it will not be so likely to penetrate the brush as the looser, and then the soil is left for the top. The dirt should be ridged on the top of the ditch and a furrow run (with a three horse plough) on each side, to protect the ditch in case of a heavy rain. Let it remain for two weeks in this condition and it is finished—it requiring about that time to settle properly.

This species of ditch possesses many advantages, some of which are as follows: First, that the water cannot wash, as it does not come in contact

with the earth; the first layer of stones being forced into the earth (by the weight above) furnish a bed for the water. Secondly, it is impervious to craw-fish, which selfish little fellows will dam or obstruct a stream under ground in order to back the water into their holes. Another reason is, that it requires less time and less labor. I could mention other reasons, but it is useless; being perfectly satisfied that any one who will *strictly* follow the directions, will be surprised at the quantity of water which will be carried off by a ditch of this size, and the wonderful facility with which the water will percolate between the stones. I ask a fair trial. I mean that the owner shall give his own *personal* attention, and not trust to the laborers, who either do not know, or else do not care in most cases. GLENOVER.

BREEDS AND RACES OF CATTLE.

To the Editors of the American Farmer:

GENTLEMEN:—An article upon Breeds and Races of Cattle, taken from the "Maine Farmer" appeared in your April number, and I think requires a passing notice. The writer very properly draws a distinction between Breeds and Races, defining the former, as those "that have been manufactured by the skill of man, by breeding for a series of years, until certain points, and characteristics have become established in them, and are with care, kept up with comparative ease"—the latter he defines as those "made not by man but established by nature"—so far the "Maine Farmer" and I concur, but we disagree as to the classification; he having classed the Herefords, with those that by careless breeding are constantly "*crying back*"—and in sustaining my position, will give the experience of two gentlemen, whom it has been my good fortune to meet since reading your April number—first, Col. W. D. Bowie, of Prince Georges county—his experience is of some years standing—he commenced breeding a Hereford bull, upon ¾ and 15-16 Devons, and out of fifty calves from these nearly full bred Devons—in all, the Hereford points were indistinct. Second, Mr. S. P. Tallmadge of Rochester, N. Y., commenced six years since, breeding upon Grade Short Horns, and his experience corresponds with Col. Bowie's. My experience has been limited. Having purchased in 1856 a bull two years old, from him I have had twenty calves, in every case from Grade Ayrshire and Short Horn Cows, and without exception, distinctly marked with Hereford points. A stronger case came under my observation during the past winter, upon the farm of Frederick Pumpelly, Esq., near Owego, N. Y.; to all appearances, a full Hereford calf, was shown, it proved to be the produce of a half blood Hereford Cow, and a full bred Short Horn Bull.

With little trouble I could procure much of such evidence, as given above, but I have not the disposition to occupy more space in your valuable journal, at least until some stronger evidence is brought to bear against the Herefords, being a distinct race, than the statement from the Maine Farmer.

With my best wishes for a long term of usefulness to yourselves and the American Farmer,

I am, gentlemen, very truly yours,

JOHN MERRYMAN.

Hayfields, Md., April 11th, 1859.

BREEDS OF SHEEP.

CLARKE COUNTY, VIRGINIA.

To the Editors of the American Farmer:

In the April number of this most useful work, there is a piece headed "Merinos vs. Cotswolds," a reply of Mr. W. D. Wallach, of Culpeper, to Col. J. W. Ware, of Clarke. Agricultural discussions, if conducted in a proper spirit, should always be beneficial to the agricultural community—exciting enquiry, and eliciting information As I have been for many years a sheep breeder, and have handled several of the most esteemed races of sheep in our country, either pure blooded or very deeply bred into the different races, among them Merinos, South Downs, Bakewells and Cotswolds, I beg leave to offer to these gentlemen, and to agriculturists in general, a few remarks, the result of my experience upon the subject. Are not these gentlemen discussing a question which does not admit of a practical solution. Is it possible, apart from localities and circumstances, to determine whether long woolled or short woolled, coarse woolled, or fine woolled sheep, Cotswolds or Merinos, are most profitable? It seems to me that the general sentiment of all breeders, American and foreign, has settled this question by conforming the stock bred in different districts of the same country to the circumstances of those districts. In England, where capital and skill, unwearied perseverance and indomitable energy, encouraged by increasing demands and ample remuneration, have brought all domestic animals to an extraordinary degree of perfection, the principle of adaptation to place and circumstances exercises controlling influence with breeders distinguished alike for skill and success. In the rich vales of Gloster, Monmouth, Oxford, Kent, Surry, &c., the Cotswold sheep and the splendid Short-Horn are found; a little farther West and East, on the higher lands of Hereford and Cambridge, are the second cattle and sheep in size, Herefords and Southdowns; and thus, as a general rule, as warmth of climate and fertility of soil diminishes, are to be found animals decreasing in size, until in the Highlands of Scotland we meet with races small in size, but with coats of hair like our buffalo, and constitutions which enable them to stand even a Highland winter. In our own country the same practice prevails. In the Northern States, the Devon cattle and the smaller races of sheep abound, whilst on the exuberant grass of limestone lands of the Middle States, and in the great basin West of the Allegany Mountains, the imported Short-Horn and the Cotswold sheep are almost universal favorites. I speak in general terms, of course. There are, I am well aware, some exceptions; gentlemen of unlimited wealth who can, and who will pay any price for a fancy, whether it be a pet animal, native pine-apples or strawberries at Christmas.—Assuming the above stated position to be correct, it will certainly be impossible to assert that most profit results from raising either Col. Ware's Cotswolds, or Mr. Slaughter Bradford's Merinos, without taking into consideration surrounding circumstances, to some of which I will presently refer; and I will take the liberty here to say that in my opinion, these gentlemen have both, by their successful efforts to introduce here and propagate two distinct races of sheep, adapted, as I think, to different regions of our country, conferred upon those interested in agriculture a lasting and ines-

timable benefit. I consider them both public spirited gentlemen—both public benefactors; and I heartily wish them a full meed of success. In the valley of Virginia, where lands have been selling at from $50.00 to $75.00 per acre, the farms are generally moderate in size. Five hundred acres of our best lands are considered a very good, if not a large farm. At $60.00 per acre, the capital in land alone would be $30,000.00. Of this probably, two-fifths of the cleared land would be annually cultivated in wheat, one-fifth corn; thus leaving only two-fifths for homestead, orchard and grass. On this system it is very important to have as much value concentrated in as fat animals as possible; and Cotswolds are very valuable, affording a good return in wool and mutton at an early age. Col. Ware's sales of muttons, as I know personally, have been frequent, and at large prices. I once sold, myself, grade Cotswolds, fourteen in number, for $13.00 apiece. Of these sheep, four were ewes drawn from my breeding stock; ten wethers which had been sheared only twice. They were delivered, I think, in December, and had been but little grain-fed. I have now on hand nineteen grade Cotswold wethers which have been sheared only once. For these I was offered within the last month, 7 cents, gross weight, provided I would deliver them at the Baltimore scales. I do not intend to accept the offer, as if I cannot sell them at home, the clip of wool will pay for keeping them another year. The general price for grade Cotswold muttons in this valley, sheared once, is, I think, not less than $7 or $8 a head, and they very often bring $10 apiece at that age. The first clip of wool will nearly or quite pay all expenses of rearing these muttons. These sheep do occasionally die of fat, or apoplexy. I have lost a few from that cause. For the Piedmont country where lands are (or rather, *once were*) cheap; where grasses are thinner on the soil, and where more surface must be passed over by animals to procure food, a lighter and more active race of sheep is probably desirable; and here, I should imagine, Mr. Bradford's Merinos would be profitable, more so, even, than the Cotswold, with his flowing fleece and his faultless form. It has been thirty years or more since I had anything to do with Merinos, and I have consequently not kept myself informed as to the very great increase of weight of fleece in that race of sheep. When I knew them, an average of three or four pounds of unwashed wool was, as well as I now recollect, looked upon as a good yield for a flock of Spanish Merinos. The French, especially from the Rambouillet flock, did perhaps something better; but such weights as those now given, were not then, I think, known. The quality of the grade Merino mutton was, I well recollect, most excellent. The only objection which could be urged against a saddle from a Merino of former days, was that the carver was very apt to spoil the edge of his knife against the bone before he could satisfy the company. Whether this arose from the small quantity or the extra good quality of the meat, this deponent saith not.

Mr. Wallach will, I am sure, excuse me for correcting a mistake into which he has inadvertently fallen. Col. Ware has no other shepherd with his flock than a servant. He never has had, for a day, so far as my knowledge goes, and I have lived near him for the last seventeen years, in the same county, and upon terms of intimacy all my life. Whatever credit Col. Ware's success as a breeder deserves, is exclusively his own; he alone is entitled to that credit, be it what it may. with great pleasure bear this testimony to Col Ware's public spirit and energy, spontaneously and without his knowledge.

A Clarke Breeder.

CAUSE OF FAILURE OF ORCHARDS.

Loudon Co. Va., 4th Month, 7th, 1859.

To the Editors of the American Farmer:

In the last number of the Farmer is an article from a correspondent in Madison county, Va., on "Apples Rotting before Ripe," and asking to be "enlightened as to the cause and remedy." The editors say "an insect is the cause." To this I take an exception, and as pomology is something of a hobby with me, I propose to give my reasons for my dissent, and when duly considered, I take it that it will account for nine-tenths, if not ninety-nine hundredths of the failure of orchards. It is the "regular cultivation" that this correspondent says he has given his orchard. We may rest assured, that when we disregard nature's laws, she will exact the penalty—there is no getting clear of it. What are natures laws, in relation to the growth of trees? Look at the forest, where man does not interfere, and what do we find? There every tree throws out a circle of roots, just below the surface, where they obtain the benefit of the decayed vegetable matter from the leaves, &c.—How is it with what are called well cultivated orchards? The ground between the trees is regularly ploughed more or less deeply The surface roots are torn off and not allowed to grow; the roots that do grow, are forced down into a colder and unproductive soil, devoid of vegetable matter, that great promoter of growth, and without which no man in his senses would attempt to grow a crop of grain. It is true, the surface soil is manured, but that is used up in the crops. The tree roots are not allowed to reach it, unless carried down by heavy rains, and even then the solutions from vegetable matter is stopped by the clay beneath the surface soil. Even the drainings from the manure heap if filtered through a few inches of fine, compact clay, will come out nearly pure; hence but little can reach the roots, and in the moderate showers of summer, none at all. That is absorbed in the cultivated soil, and supports the vegetables on the surface only.

The editors, in alluding to the cultivation of corn, advise, and rightly too, to beware of disturbing the surface roots of corn, particularly when of some height of stalk. Would not the same reasons apply to fruit trees; are the laws that govern one different from that of the other? Common sense says there is no difference, but where is the person that applies common sense to the cultivation of his fruit trees? They generally follow what their fathers followed, without taking thought whether it is right or wrong; the object seeming to be to get off the ground as much as possible, and then complain that the trees do not mature their fruit. Can we expect any other result?

The best remedy that your correspondent can apply, would be to cease cultivating the orchard with crops, merely scratching the surface with a cultivator or some such instrument very shallow, only to keep the grass and weeds from growing. It will take some years to induce a supply of sur-

face roots to put forth, and until they do, he need not expect perfect fruit, as a regular crop.

I am myself a sufferer from this common practice, and having learned something, give it for the benefit of others.

The President of the Fruit Convention, held at New York, last fall, said, "He would mention an orchard he knew in Massachusetts that yielded large crops of fair and fine fruit for market, in which there had been neither grass nor a plough for forty years, the surface merely scratched!" Other instances might be mentioned in support of this theory. A word to the wise is sufficient.

YARDLEY TAYLOR.

PREPARATION OF FALLOW FOR WHEAT.

To the Editors of the American Farmer:

DEAR SIRS:—I have been reading with unusual interest the controversy that has been carried on in several late issues of the Farmer, as to which is the better preparation of a clover fallow for wheat—the grazing or mowing of the crop closely, or *vice versa*—the turning of heavy crops of clover under, &c. I cheerfully comply with your request, and send you my modicum of experience on the subject in question. We remark *en passant* that our experience has taught us that far less depends upon whether much or little vegetable matter be turned under in preparing a fallow for wheat, than does upon the *quality* of the land, and more particularly the *preparation of the ground after ploughing—in getting it ready* for the seed. I think that vastly too little attention is paid to the preparations of fallow ground for wheat. One or two harrowings after the ground is flushed is as much as many of our best farmers give their land. I believe (and I think I have thoroughly tested the theory) that treble the greatest number named is necessary for a thorough comminution of the particles of the soil and the producing of that *compact bed* that is *necessary* to grow a heavy crop of wheat. I held the opinion (still generally entertained by most farmers in this section) that a clean fallow was absolutely necessary for growing a large crop of wheat until within the last four or five years. So confident was I of the correctness of the theory, and so universal was the testimony in favour of it, that, like one of your correspondents, I would have resorted to *fire* in order to have gotten my fields clear of vegetable matter. In the summer of 1855, however, I was compelled to turn under a very heavy crop of clover and weeds, growing upon the field I intended for wheat. They were too *green* to *burn*, and I had not stock enough to graze them off. I could only succeed in *hiding* this heavy crop of vegetable matter by greatly increasing the depth of my ploughing, which was in conflict with another theory I then held, viz: that a *shallow furrow* was the best preparation for a wheat crop. I had many forebodings as to what would be the result of these innovations upon my usual system. In walking over the field after it was ploughed with some of my neighbours we would frequently, in treading over the furrows, sink over our shoe tops, so loose was the soil. They predicted a total failure of my crop. To make the best of a bad bargain, I commenced harrowing as soon as I was done ploughing, and continued to harrow until I had gotten as compact a bed for the wheat as possible under the circumstances, and sowed it down. The result was far beyond my most sanguine expectations. The "oldest inhabitants" pronounced it the best crop ever grown in the neighbourhood. I have since grown the *heaviest crops* under like circumstances. I repeat, then, that I believe that less depends upon the depth of ploughing and the amount of vegetable matter that may be upon the land, than does upon the *after preparation*. If you think this letter, or these thoughts hastily thrown together, will be of any service to you, you can make what disposition of it you please. Wheat is looking very well at this time. Farmers very backward with ploughing, on account of the unusual quantity of rainy weather. I am, truly yours,

C. C. O.

FRUIT AND BUYING FRUIT TREES.

ISLAND VIEW, ORANGE CO., VA.,
April 4th, 1859.

To the Editors of the American Farmer:

GENTLEMEN:—In the March number of your highly interesting magazine there is an article from the pen of Franklin Davis, of Staunton, Va., upon the subject of the much neglected luxury, fruit. It will be admitted by all that fruit is not only among the first, but among the richest blessings that our bountiful Creator has given his creatures; and, notwithstanding this admitted fact, it is not an uncommon thing to pass farm after farm without half a dozen fruit trees of any kind, though it is entirely wholesome, and can with *attention* be made as profitable as any other crop. A majority of farmers attempt the culture of fruit, and about one in ten succeed. The reason is obvious. The Farmer in his "haste to get rich," is untiring in his energy in cultivating and securing his crops of corn, wheat, tobacco and oats, whilst his orchard is too often entirely neglected, and in many instances no doubt the Nurseryman bears the blame of the farmer's neglect of duty. It is a wise regulation in the Providence of God that success in any branch of business depends upon industry and attention. It is true that the farmers in many parts of this State have been basely imposed upon by Northern Nurserymen who have sent agents to engage trees to be paid for when delivered; the trees would arrive and though "small and scrubby," would be received rather than have a difficulty, and, in some cases, every tree has turned out an indifferent crab.* It is important therefore that we should know something of the character of the man from whom we purchase. I have no acquaintance with Mr. Franklin Davis—have never seen him, but, sometime ago, purchased of him, through his gentlemanly agent, Mr. Dixon, a large lot of fruit trees, grapes &c., and it is nothing more than justice to Mr. Davis for me to say that I have never seen a more healthy and vigorous lot of trees. They came to hand carefully packed, and I planted them out in strict accordance with his very explicit directions; and, up to this time, all are doing well without the loss of one. I walked through an orchard (recently sold by Mr. D.) which had been bearing a year or two, and the owner told me that every tree had proved to be the kind which Mr. Davis had represented it to be.

I have read, Messrs. Editors, your editorial under the head of "*Puffing vs. Advertising*," and I approve of your views therein expressed; but, at the

same time I cannot see the impropriety of a farmer (who is entirely disinterested) in recommending to the agricultural community, through an agricultural journal, a nurseryman or any other man whom he knows to be safe and reliable. If this plan was generally pursued, agricultural magazines would be of incalculable value to the farmer, and more generally patronized.

Yours, respectfully,
C. C. Buckner.

* We give this statement, believing it to come from a source entirely disinterested, and willing that Mr. Davis should have the benefit of it. It is desirable that reliable men should be known in so important a matter. Outrageous impositions have been practised to our own knowledge by sharpers, but we would, by no means, include in this denunciation the well accredited agents of respectable nurseries.—Eds.

Prince Edward, Va., April 19th, 1859.

Messrs Editors:—I have concluded (notwithstanding some feeling touches of the *res angusta domi*) that *I cannot do without the American Farmer*. So, gentlemen, applaud my determination, and please send me your valuable paper as before—credit my remittance, send me a receipt, and I will try to be more punctual in future. Indeed, *in the general*, I have been tolerably so, and the delay in the present instance has proceeded entirely from negligence, or from having forgotten the date of the subscription. Enough of this.

In this part of Virginia, the Piedmont region extending from tide water to the Blue Ridge, we have been very wasteful in our modes of culture, and very inattentive to the raising of the grasses.—Through the columns of the *Farmer* I respectfully request information with regard to three kinds,—the Orchard grass, the Chilian Clover, and the Honeyblade grass.

With respect to the Orchard grass: What soils does it suit? What preparation of the land, and quantity of seed are required per acre? How is it affected by the seasons? What kind of sod does it form, and what is its value for hay, or grazing? Is the Chilian Clover possessed of any advantages of the other varieties of clover known in our country? What are its properties, so far as known? Will it resist the drought of the Southern summer better than other clovers? Is it valuable as an improver of poor land? Is it hard to kill? Does the Honeyblade grass merit the seemingly extravagant encomiums pronounced on it by its friends? Will it resist drought, as pretended? What length of time does it require to mature? Would it be a more profitable crop on thin land than oats? These questions are thrown out merely as hints, and not, by any means, intended to limit the range of inquiry. If you, gentlemen, or any of your numerous and able correspondents, will kindly gratify the curiosity of the public on these points, you will, I doubt not, confer a signal favour on thousands interested in the results. I remain,

Your friend and ob't serv't,
C. V. Woodson.

The above, as will be seen, is from one of those gentlemen who take a notion, sometimes, that they can do without the *Farmer*, and find themselves mistaken. He wrote us word a month ago to stop his paper, and now sends two years' subscription in advance as an earnest of his repentance. We accept the pledge, and in answer to his queries think we can give him the worth of the money.

This Grass topic is as little understood, as it is important to the regeneration and the preservation of our lands. In the absence of experience, which the great mass of our farmers want, there are many points in which the teaching of agricultural writers mislead us. We shall be very glad, in addition to the limited response which we are enabled now to make to our correspondent, to get the benefit of the experience of some of our readers.

The Orchard Grass is, undoubtedly, valuable. For pasturage alone, or hay and pasture combined, it is next in value to red clover. It grows well on light soils or loam, it springs very early, stands drought well, grows late in the Fall, makes a close, thick turf if seed enough are sown, and makes hay of good quality if cut when in bloom. The land should be prepared for it by previous cultivation in a cleansing crop, and put into good heart by sufficient manuring. It will not pay to buy this, or any other grass seed, for poor land. Bring the land first into good heart, and then a good turf will preserve and improve it further, and support stock, which, while it will furnish manure, will yield a profit in consuming the hay and corn. Orchard grass will last a long time, and the seed is so costly that it should only be sown where it can be allowed to stand some years. Two bushels of seed if sown alone, or one bushel with clover seed. The price is about $1.50 per bushel.

The Lucerne, or Chilian Clover, or Alfalfa, is lauded in the Journals beyond what, in our opinion, it merits. It is claimed for it that it stands drought remarkably well, yields a great quantity to the acre, and allows very frequent cuttings of superior green food. In our experience, we have found it not equal to red clover in quantity of yield, nor superior to it in other respects, and much more difficult to cultivate. It should be sown only for the purpose of cutting and feeding green, on a deeply worked, highly manured, and well cleansed soil. It is perennial, and will last many years.

Of the Honeyblade we have spoken in our memoranda for the month. It is an annual. Sow the first of June, and you may cut in August a heavy and good crop, on rich ground. Three dollars a bushel is enough for the seed, but if we wanted to make the crop we should cheerfully give that sum for the third of a bushel, sooner than not have it at all.—Eds.

☞ A valuable contribution on Lawns and Parks is received, too late for this number.

BREADSTUFFS.

The present fiscal year, which ends with June, 1859, will probably present a smaller quantity of breadstuffs exported from the United States than in any year since 1849. Up to 1846, the largest quantity of wheat that ever was exported in one year, since the European wars, was 11,198,365 bushels, at $1 per bus., in 1840. From that date up to 1846, or during the operation of the tariff of 1842, the exports were very small, and the price of flour very low. The following table shows the import and export of wheat flour, in bushels of wheat, in each year:

	Exports.		Imports.		
	Bushels.	Value.	Bushels.	Value.	
1838.....	2,947,093	3,617,034	937,180	940,833	9.50
1839.....	4,712,066	7,089,351	41,725	57,747	6.87
1840.....	11,198,365	11,779,098	1,436	1,069	5.37
1841.....	8,447,670	8,582,537	652	900	5.00
1842.....	7,237,958	8,291,308	4,153	3,796	6.19
1843.....	4,519,055	4,027,182	12,121	8,542	4.50
1844.....	7,751,587	7,232,898	1,511	1,664	4.62
1845.....	6,365,866	5,735,372	351	287	4.50
1846.....	13,061,175	13,350,644	822	633	5.68
1847.....	26,312,431	32,183,161	20,364	22,878	5.95
1848.....	12,764,669	15,863,284	269,929	357,639	6.22
1849.....	12,309,974	13,287,629	104,110	96,659	5.25
1850.. ..	8,658,982	8,817,015	2,693,803	2,192,395	5.00
1851.....	13,948,499	13,303,332	2,357,492	1,618,610	4.77
1852.....	18,680,686	14,424,352	2,416,088	1,569,498	4.12½
1853.....	22,379,126	22,687,200	2,892,750	1,796,549	5.60
1854.....	28,148,595	40,121,616	6,469,650	4,607,677	7.78
1855.....	6,830,584	12,238,154	2,517,892	3,438,874	10.14
1856.....	25,708,007	44,390,809	468,912	6,318	8.30
1857.....	33,730,596	48,123,318	9,170	1,086	7.00
1858.....	26,487,041	28,390,388	40,742	46,469	5.50

After 1845, when the famine in Ireland commenced, and was followed by a series of short crops in Europe, which led to the abolition of the English corn laws finally in 1849, and the modification of the corn laws of the nations of Western Europe, the export trade of the United States took large proportions, particularly in 1854, the year of war. In that year the harvest came in short, and high prices tempted such extensive shipments from the United States early in the year, on inaccurate estimates in regard to the crops, as led to serious difficulties. The New York Tribune, and other papers which affect an influence with the agriculturists, held out the idea of a large crop, which induced the farmers to sell liberally. The result was large oversales, and almost famine prices in the following year. There was, consequently, in 1855, very little to spare for export. These circumstances, however, produced reaction. The high prices stimulated production, and the influences of war and short harvests still continuing, the exports of 1856 reached the highest figure ever known; at the same time, the large immigration into the United States, the great expenditure for railroads of the West, and the extensive migration from the old to the new States continued to take up the produce of the Western States, on the spot, at high prices, thus giving great encouragement to the cultivators of the soil. The breadth of land under plough rapidly increased, while the railroads brought a greater range within marketable distance. The local consumers in the Western States have now disappeared, leaving only the producers, who now look to the Eastern States for a market for their surplus, and that at a moment when the good harvests of England and Europe cut off the export demand. Thus, with a much larger supply, the market is considerably narrowed. In the column of imports above is embraced mostly the grain received from Canada, which is mostly re-exported, but not given in the column of exports, which expresses only domestic wheat and flour. It will be observed in the above table, that the lowest range for wheat was the four years ending with 1846, which were the years of the operation of the tariff of 1842. In those years the average for flour was $4.75 per bbl. In the four last years of the tariff of 1846, the average was $8 per bbl., with very large sales abroad. If we were to follow the tricky mode of reasoning adopted by the easy school of economists, we should seize upon this coincidence, and assure the farmers that it is irrefragable proof of the beneficent action of a low tariff, which enabled them to sell four crops of wheat in the four years ending with 1856, say 600,000,000 bushels for $900,000,000, while under the tariff of 1842 they got but $550,000,000—a clear loss of $350,000,000 on wheat alone, as the consequence of restricting trade with our food customers in order to please the iron masters of Pennsylvania. This is the style of the easy protectionists, who mingle their sophistries with those of other isms in the columns of the Tribune, although there is no doubt but that a tax imposed upon certain articles of import, for the avowed object of restricting the sales of that article in our markets, induces the foreign makers of those articles to seek the raw produce they want, and which they admit free, in other and more liberal markets than our own; yet their influences are quite subordinate to the state of the crops, and the true reason of the small export of food up to 1846 was, that Western Europe had enough of its own, whilst since then, and more particularly during the Russian war, their wants were very large, hence they buy now and did not buy then. The crops in Europe, as elsewhere, run in very regular cycles of five years, alternating good and bad. The cycle of good crops is just now entered upon, and it will be probably the case, should peace be preserved, that the demand will not be active again for two or three years; as a consequence, the manufacturing and raw material interests will have their turn of prosperity, as the food growers have had theirs. The food buyers will have the rain on their side of the hedge, and the food sellers must wait another cycle.—*U. S. Economist.*

[From the United States Economist.]

WOOL.

To the Editor United States Economist:

SIR:—Assome ignorance seems to prevail among manufacturers and dealers in wool, in calculating the loss in preparing it for manufacturing, I have thought it may benefit some by showing the proper way of calculating loss in scouring, &c.

Wool costing 50 cents per lb., and estimated to lose 40 per cent., is loosely calculated to cost 70 cents per lb. clean. The true calculation is 100 lbs. of wool losing 40 per cent., leaves but 60 lbs. clean wool; this divided into $50, will make the wool cost 83⅓ cents per lb. clean.

I have thought it best to send you this, for I have had occasion to put parties right on this subject before, and if any one is benefitted by it, I feel you will be gratified.

Respectfully yours,

A SUBSCRIBER.

BALTIMORE, March 26, 1859.

SCUPPERNONG GRAPES.

The editor of the "Farmer and Planter," writing from Columbia, South Carolina, says in that periodical for March: "We know of several instances of the Wild Scuppernong—one in the neighbourhood of Dr. Pearson, in Fairfield, where a solitary vine has grown and flourished for years past. At another location, "The Rock House," near Lexington Court House, S. C., there are large numbers of indigenous white Scuppernong vines growing in a state of nature; and the lamented Dr. Geo. Battey, of Georgia, informed us of a similar locality in Columbia county, Georgia. We consider the white Scuppernong the offspring of the *Common Bullace, (Vitis rotundifolia)* being sustained in this opinion by the facts, that a *large number of the seedlings of this grape are black.* All the seedlings of one of the finest vines in the South, at the residence of Mrs. PICKENS, Alabama, are black. This vine covers more than an acre of land, and produces immense crops. A regular addition of cedar trellis is provided annually for its extending growth. Col. C. P. CRAWFORD, of Blakely, Georgia, has also sent us a superior Black Scuppernong, springing from the white.—The "Fox Grape," in the Eastern part of our State, is a black Scuppernong. We have now in course of propagation, a stock of white Scuppernong vines from the original location from whence all the cultivated sorts have been derived. We believe that, for the man who grows vines slip-shod, without system, the scuppernong is the best of all the grapes, as it requires only something to run on, trellis, trees or rocks, and no pruning, and bearing as certainly as any other fruit."

VALUE OF PRODUCTS.

The asserted depreciation of gold that has been theoretically so perseveringly arrested by many writers, and which has been looked for with much anxiety by many persons, has not manifested itself as yet. We have frequently had occasion to call the attention of our readers to this fact, but the causes of the non effect of gold upon the value of property seem nevertheless, not to be kept in mind. It is obvious that the supply of gold must, whatever may be its actual amount in figures, be relative, being large or small according to the amount of business done, and the quantities produced of articles other than gold. Thus, if the supply of gold is as one, and of other commodities two, and the supply of gold doubles, being represented by two, it is not relatively greater if the influence of its increase imparts a stimulus to all other productions and business enterprise, so that five, instead of three, represents the business it is to transact. This, in fact, has been the case; the demand for loanable capital has been greater than the supply of gold. This process we described as in operation in our number for 26th of March, 1853, six years since, as follows:

"In Great Britain and the United States together, gold in round numbers to the extent of two hundred and sixty millions has been coined in five years, and the supplies at the great money reservoirs are no greater than before.

The demand for money for circulation both in the United States and Great Britain has absorbed a large amount of gold, and for reasons not generally borne in mind. It is obvious that where the quantities of industrial products are much increased and their money values are also enhanced, that the money required to effect exchanges in these, increases in a twofold proportion. Thus, 1,000 bales of cotton at $30 is represented by $30,000 of gold—say 2,000 ounces; 1,500 bales, at $40, require $60,000 of money, or 4,000 ounces of gold. Throughout the world the production of most commodities has been increased in volume, and a rise in prices, ascribed to the depreciation in gold, has taken place. It follows therefore, that the increase in the supply of gold produces a reaction which holds the depreciation in check, like the reaction which water offers to a vessel propelled over a certain speed. This demand for currency to transact a given business is, however, greatly modified by rapidity of circulation, activity of markets, and facility of communication. Nevertheless, increasing production and higher prices demand more currency."

The statistics which we have recently given of the increased trade of nations illustrate the great increase which has taken place in the productions of all other commodities. In more direct illustration, however, we have compiled a table of the leading agricultural products of the United States for the present year, as compared with 1852, with average values as follows:

CROPS AND VALUES IN THE UNITED STATES.

	1852		
	Crop.	Price.	Value.
Cotton, bales....	3,095,029	$34	$104,070,986
Wool, lbs.....	52,422,797	35c	18,347,978
Sugar 257,138,000		4½	11,577,121
Molasses, gls....	18,300,000	22	4,026,000
Pork, lbs.....325,016,040		6	19,500,962
Tobacco 240,000,000		6	15,000,000
Rice, tcs.....	166,706	$25	4,102,001
Coal, tons	5,382,269	3 75	20,183,310
Wheat, bush....100,503,899		51c	55,000,000
Corn 600,000,000		30	180,000,000
Rye	14,000,000	50	7,000,000
Oats.....146,000,000		25	38,666,000
Total.....	....	..	$477,534,358

	1859		
	Crop.	Price.	Value.
Cotton, bales....	3,700,000	$60	$222,000,000
Wool, lbs.....	70,000,000	50	35,000,000
Sugar.....413,000,000		5½	21,171,000
Molasses, gls...	25,000,000	30	7,800,000
Pork, lbs.....218,011,000		7	50,226,000
Tobacco.....350,000,000		8	25,101,000
Rice, tcs.....	191,000	28	4,500,000
Coal, tons.....	9,000,000	4	36,000,000
Wheat, bush....150,000,000		80	120,000,000
Corn.....800,000,000		40	320,000,000
Rye.....	15,000,000	60	9,000,000
Oats 200,000,000		30	60,000,000
Total.....	....	..	$910,788,000

Such has been the relative increase of a few articles of agricultural productions in the United States, the interchange of which requires double the amount of money that the same articles required in 1852. The numbers of people, of railroads, of manufactures, of ships, &c, have all greatly increased in the United States, and in England, France, Germany, and the commercial world generally, the productions in all industrial commodities has been quite as active, while the intercourse

with Asia has carried off an immense quantity of coin to meet the same developments of industrial industry there. All these afford very distinct and sound reasons why gold should not have depreciated, since if it does not go out of existence, it has annually increasing duties to perform, and it may well be admitted that but for the discoveries in California and Australia, nothing like the progress which has taken place in productive industry could have occurred. It is obvious that if a much larger quantity of general products is annually produced, for the same reason a much larger quantity is consumed, since those who produce do it for the purpose of enjoying that which they produce directly, or of exchanging it for some equivalent. By this means, the whole mass of people have greatly improved in condition. All of them have more of the necessaries and comforts of life, producing more and consuming more. The traffic on the operation of transporting and exchanging their products and turning them into manufactured goods, has increased in proportion, and with its increase requires a larger amount of money as a medium of exchange. These multiplied causes have continually created a demand for gold as fast and even faster than it has been produced. The operations of business have been aided by the expansion of credits, and as these have stimulated business they have at times created a demand for money in excess of the gold supplies, and a fall in prices has demonstrated that gold has not depreciated by business in value relatively to the demand for it. At this present time the supply of gold, or money, or capital, is large because the demand has almost ceased to exist. There are, however, in existence, elements of business which may carry the demand for it to a point higher than ever before experienced. The number of ships, railroads, stores—all the instruments of trade—are in great abundance, and the earth everywhere teems with natural wealth. The time is at hand when activity of interchange will again take place, and the demand for capital be renewed for purposes of enterprise. The apparent effort of such a renewed activity will be a rise in prices which will absorb a large amount of money, and stimulate a greater production of general commodities, to be again succeeded by a reaction. It is probably the case, however, that the level of values will, under the influence of accumulating gold, gradually rise at each increased revulsion, and the lapse of a long period of time may show a depreciation of gold as compared to other commodities.—*U. S. Economist.*

Too Early Pasturing is one of the worst practices of shiftless, thriftless farming. The habit of grasses to *tiller*, or "stool," and thus fill the land with new vigorous roots still deriving more or less sustenance from the parent stock gives them, if not cropped too early, a great advantage of weeds, which start later and few of which increase in this way. Those which grow from runners do not begin to throw them out until the heat of summer, and those which are annual, will hardly appear at all if the grass gets possession of the soil. Grass continues to increase from the root till the weather becomes dry, and the soil no longer offers a moist and attractive bed for the young roots. The energies of the plant are then given to producing seed, which involves a growth of leaves and stalks. Land should not be pastured till this process is well under way.—*Homestead, Conn.*

ON THE FEEDING OF COWS FOR THE PRODUCTION OF BUTTER.

Sir John Sinclair has stated that, "it is supposed that the same quantity of herbage that would add 224 pounds to the weight of an ox, would produce 900 English gallons of milk." Now, if we reckon 6 ounces of butter to be the average weight obtained from a gallon of milk, we will get 337 pounds of butter from the same quantity of herbage as was supposed to produce 224 pounds of beef. Or, if we convert the two into their respective money values, according to present rates, we will obtain £6 10s. 8d. as the value of the beef—reckoning the beef at 7d. per pound, and £16 17s. as the value of the butter at 1s. per pound. If the hypothesis of Sir J. Sinclair be correct, there can be no doubt that it is the interest of the farmer to adopt the dairy system, in preference to the feeding of cattle. But, even granting that the difference between the production of beef and butter is not so great as stated by him, yet it is generally admitted, that there is a considerable margin in favour of butter, particularly when we take into account the relative price of the two at the present time.

* * * * * * *

Without referring at all, at present, to the kind of cow most profitable for a butter-dairy, we pass on to a consideration of the kinds of food that may be used most profitably for the production of butter. The great authority on this subject, is Mr. Horsfall, who has laid the public under great obligations to himself, by the publication of his experiments and views on this interesting subject. His method of feeding is the following:—In May his cows are turned out on rich pasture near the homestead; towards evening they are housed for the night, when they are supplied with a mess of steamed mixture, to be afterwards described, and a little hay each morning and evening. During June, mown grass is given to them instead of hay, and they are also allowed two feeds of steamed mixture. This treatment is continued until October, when they are again wholly housed. After this they receive steamed food *ad libitum* three times a day. After each meal, cabbages are given, from October till December; kohl rabi till February; and mangold till grass time—the supply of each of these varieties of green food being limited to 30 or 35 pounds per day for each cow. Four pounds of meadow hay are also allowed after each meal, or twelve pounds per day for each cow; and water is placed before them twice a day, of which they partake as much as they feel inclined for. The steamed food spoken of, consists of "5 lbs. of rape cake, 2 lbs. of bran for each cow, mixed with a sufficient quantity of bean straw, oat straw, and shells of oats, in equal proportions, to supply them three times a day with as much as they will eat. The whole of the materials are moistened and blended together, and after being well steamed are given to the animals in a warm state. The attendant is allowed one lb. to one and a half lbs. of bran meal per cow, according to circumstances, which he is charged to give to each cow in proportion to the yield of milk; those in full milk, getting two lbs. each per day, others but little: it is dry and mixed with the steamed food on its being dealt out separately." This is certainly high feeding, but it is amply repaid by the results; for, while cows fed

in the ordinary way seldom produces milk which yields more than one ounce to every quart, Mr. Horsfall's milk gives upward of one and a half ounces to every quart. It is, also, an important part of his system, never to allow his cows to fall off in condition. He considers the maintenance of the condition essential to a large yield of milk. There can be no doubt of the soundness of this opinion. A cow low in condition cannot give the same quantity of milk, as, much of the nourishment of the food is drawn off, to make up the condition of the animal. And when a very lean cow is put on rich food, it is some weeks before the full benefit of the food can be obtained in milk, for the reason above stated. Another useful deduction made by Mr. Horsfall from his experiments is, that albuminous matter is the most essential element in the food of the milk cow, and that any deficiency in the supply of this will be attended with loss of condition, and a consequent diminution in the quality of milk.

In Scotland bran is not very often used as an ingredient in any mixture of food for milk cows; but it will be seen from the foregoing, that it forms an important part of Mr. Horsfall's mixture. Some time ago we came upon the following extract, we believe from the *Irish Farmer's Gazette*, which gives some valuable hints as to the use of different substances in the feeding of milk cows:—"In reading over the experiments on feeding in Stephens, a difference of opinion exists as to the comparative fattening qualities of linseed cake, bean, and other meal; and in the *Report of the Larue National Agricultural School for* 1853, 1 lb. of beans is said to be equal in fattening qualities to 30 lbs. of turnip, and nearly 3 lbs. of oat meal. I tried the bean meal one season, at the rate of 3 lbs. a day boiled for each milch cow with mangold, turnips and hay. By Feb'y one of them was fat, but I may say dry; and the others with about half the quantity of milk they had when commencing. I tried for two winters oat meal, the same quantity in the same way, and each cow gave three times the quantity of milk and butter, and turned out full better the following summer. I tried the same quantity of yellow Indian meal last winter, and I think it good for both milk and butter. I tried bran for three winters, at the rate of four pounds every night for each cow; it was equal to the oat meal while using, and my cows turned out better the following summer, than on any other feeding. The bran not only keeps them healthy and gives them a greater relish for their food, but there is some combination of qualities in it, beyond what any writer I have seen attributes to it."

The state in which the food is given, has also a great effect on the production of both milk and butter. We have observed more than once, that the yield of butter and milk is never so great when we give cows boiled turnips, with beans boiled quite soft amongst them, as when they get the boiled turnips and the same weight of beans made into meal and mixed raw with them.—Again, there is more milk, and no taste of the turnip in it, when the turnips are pulped and mixed with cut straw or chaff and fermented, than if the same weight of turnips are given whole and raw. In the *Journal d'Agriculture Pratique*, we read a short notice on this subject, by M. Lejeune, a director of the Agricultural School at Thourout, in Belgium. The facts he reports are not to be regarded as experiments to test any theory, but are merely extracted from his accounts, and shows the importance of attending to the mode in which their food is given to milk cows. In February, 1855, the milk of eight cows was selected for experiment. The cows were fed in the following manner:—Each cow got per day 4.4 lb. of meadow hay, 13.2 lb. of straw, .48 lb. of linseed meal, 11.5 lb. of beet root, and a cooked mush, consisting of 55 lbs. of turnips, 27 lbs. of beet root, 1.2lb. of linseed meal, 3.2 lb. of rape cake, 1.1 lb. of grain dust, 1.1 lb. of mixed meal, about 1½ ounces of salt, and 6 gallons of water. From this very watery diet a large quantity of milk was obtained, sixteen quarts of which gave one pound of butter. In the month of February, 1856, the calculation was made from the milk of ten cows, eight of which were those with which the observations were made in the previous year. The nutritive value of the food detailed above, was calculated to be equivalent to upwards of thirty pounds of good meadow hay per head. The food given in 1856 consisted of oat straw, beet root, the meal of rye, oats and buckwheat, linseed cake, rape cake, and the dust of wheat or bran, given in such proportion as to make the equivalent value of the day's feed equal to a little more than thirty-one pounds per head of hay. None of it was cooked, and the beet root was reduced to small pieces, and sprinkled over the meal. There was not the same quantity of milk, but the proportion of butter was much larger, being two pounds of butter for every twenty quarts of milk. The cows, with the exception of the food, were managed in the same way in both years, and there were more newly-calved cows in 1855 than in 1856.—*Quarterly Journal of Agriculture.*

MERINO SHEEP IN TEXAS.

HEMPSTEAD, March 27th, 1859.

FRIEND CUSHING:—I saw two pure blooded Merino sheep sheared at the plantation of Dr. Peebles, near Hempstead, on yesterday. One was a buck and the other a ewe, about two years old. The fleeces weighed 21¼ and 19½ pounds, respectively, samples of which I send you.—These sheep were from the lot imported recently from New York, by Mr. John D. Patterson, and were of but medium size. This wool is worth from 50 to 60 cents a pound in New York. At 55 cts. the average value of a fleece would be $11. Our Texas wool of improved breed weigh about 4 lbs. to the fleece, and sells from 20 to 30 cents in New York. The average value of a fleece would be, at 25 cts., $1 each. Dr. Peebles paid $300 for this pair of sheep, and the investment will be doubly returned from the crosses this year. He has a fine flock of improved sheep numbering 400 or 500 head. Col. Groce, Mr. Betts, and others, of this vicinity here, bought some of these sheep, and Mr. Volney E. Cavitt, of Wheelock, who has several thousand head of improved Texas stock, has also purchased about twenty head from Mr. Patterson. Mr. Patterson and his customers are doing themselves and the State valuable service. Yours, &c.

Houston Telegraph. A.

☞ Dr. TOGNO, well known in the South as a writer on Horticulture, has departed this life.

AMERICAN FARMER.

Baltimore, May 1, 1859.

TERMS OF THE AMERICAN FARMER.

Per Annum, $1 in advance—6 copies for $5—13 copies for $10—30 copies for $20.

Notice.—Price, if not paid within 6 months, $1.50 per year.

Advertisements.—For 1 square of 8 lines, for each insertion, $1—1 square per annum, $10—larger advertisements in proportion—for a page, $100 per annum; a single insertion, $15, and $12 50 for each subsequent insertion, not exceeding five. Address,

N. B. WORTHINGTON,
Publisher of the "American Farmer,"
Carroll Hall, S. E. cor. of Baltimore & Calvert sts,
Baltimore.

PLEASE TAKE NOTICE.

That after the issue of our *June* Number, which will be the last of the current volume of the *American Farmer*, our old accounts will all be closed, and no paper will be mailed to subscribers which is not paid for in advance.

It is not necessary we think to enter into any explanation of the necessity which impels us to the adoption of this rule, except to say that it is the only way in which we can insure payment for our magazine at all. We charge but one dollar a year, and that is enough, *if we get it*. But we do not get it, and there is no possible way of getting it but this. There are thousands of our friends whose punctuality is quite sufficient for our purposes, though they do not actually pay in advance. They will understand of course that we apply this rule to them only because it would give infinite trouble to make any discrimination; the rule must therefore be universal. We are confident that they and the great majority of those who are less punctual, will acquiesce in the propriety of this course if they have an idea of the per centage of loss we are subject to under the present system.

With regard to the latter, we have no doubt whatever, that their neglect of these bills is usually the result of carelessness, in what seems to each a very small matter. They will now, we are sure, separate themselves from another class who are willing to profit by the labours of other people, but want the moral principle to induce them to pay the obligation. That there are some of this sort we have evidence in our notices from Post Masters to stop papers which have been received for years; that the party receiving refuses to pay; or has gone to the west, or to Texas, or is dead, alas for him! without paying the bill.

☞ Will our friends whose bills are in arrear do us the especial favor of closing up these old accounts at once—*now*. They have all we think had a statement of their accounts within six months. We are particularly desirous of closing all these past matters, and taking a fresh start.

In making a remittance remember that our new volume begins with July, and to save trouble, send a year in advance. Our terms of payment in advance, will hereafter be strictly adhered to, and no paper issued, except gratuitously, until paid for. Every subscription will stop promptly at the expiration of the time it is paid for.

Reading Matter and Advertisements.—The large amount of advertising matter we publish, makes an impression with many persons that it is done at the expense of the reading matter of our magazine.—This is an error that we beg our friends will take some pains to correct. The regular amount of the Farmer proper is 32 pages each Number, or 384 pages a year. For our advertisements we have always extra sheets; and however formidable the quantity of matter they contain, more, generally, than the paper itself, it is that much extra to the subscriber. Any subscriber therefore who takes no interest in our advertising sheet may still be satisfied that he gets the worth of his money.

ACKNOWLEDGMENTS.

From S. L. Goodale, Secretary of the Maine Board of Agriculture, his Third Annual Report of the Legislature of that State. It is a very interesting document, compiled with great care and ability, and presents a very gratifying statement of the progress of agriculture in the very prosperous regions of the far "Down East."—From Benjamin Perley Poore, Secretary of the Society, we have received the first number of the 7th volume of the Journal of the United States Agricultural Society. This publication now appears and will continue to be published *quarterly*. The No. before us is a stout pamphlet of 88 pages, and well printed at Washington, D. C. It is of the size of this Magazine, and the editor states, is not intended to interfere with the Agricultural Press of the country.—From Eben Wight, Esq., Recording Secretary of the Massachusetts Horticultural Society, we have received the Journal of that Society for March.—From B. P. Johnson, Corresponding Secretary of the New York State Agricultural Society, we have received, together with the Journal of that Society for April, a List of Premiums and Regulations for the 19th Annual Exhibition to be held at Albany next October.—From Orange Judd, Esq., of New York, we have received a pamphlet entitled "Onions: how to raise them profitably."

Catalogues Received.—From Messrs. T. B. Yale & Co., Proprietors of Nurseries near Rochester, New York, their descriptive Catalogue of Fruits and

descriptive Catalogue of Ornamental Trees.—From B. K. Bliss, of Springfield, Massachusetts, his descriptive Spring Catalogue of Dahlias, Verbenas, Petunias, Phloxes, Carnations and Picotee Pinks.—From Messrs. H. D. Emory & Co., of Chicago, Ill., their descriptive Catalogue of Seeds, Vegetable, Agricultural and Flower.—From Messrs. Hovey & Co., of Boston, Massachusetts, Catalogue of Mr. Dana's new Seedling Pears and of other fruits.

The New American Cyclopaedia, Vol. v.—From Messrs. D. Appleton, of 346 and 348 Broadway, New York, we have received the fifth volume of this valuable "Popular Dictionary of General Knowledge." The list of contributors to this and the preceding volumes, published at the end of the present volume, contains the names of some writers whose reputation for learning and ability is well established and widely known. Among them are the names of Bancroft, Emerson, Everett, Professor Felton, Richard H. Dana, Jr., Professor H. Goadby, of the Michigan State Agricultural College, Simms, of South Carolina, John R. Thompson, of Richmond, and many others.

This work has now taken a position among the necessary adjuncts to a well selected library, and will be more popular as each successive volume appears, and the reading public become more fully alive to its great merits. The present volume contains the following articles relating to Maryland:—Biographical notices of *Judge Chase*, of *Bishop Claggett* and of *Clayborne*, so celebrated in the earliest history of the Colonial era; and two short articles entitled *Chesapeake Bay* and *Choptank River*.—There is quite a long essay under the title *Chemistry*, and a very full biographical sketch of *Henry Clay*. The titles *Chimneys*, *Cheese*, *Coast Survey*, *Chinese Language and Literature*, *Comparative Anatomy*, *Concrete*, *Coal*, *Copper*, *Cotton and Clover*, are all carefully written, and most of them very interesting.

Col. Hughes' Address at Frederick.—We have received, at a late day, from himself, a copy of the excellent Address of Col. G. W. Hughes, delivered in October last before the Frederick county Agricultural Society. We hope, hereafter, to present at least a portion of it to our readers.

"THE EXCHANGE."

We take pleasure in calling the attention of our readers to the advertisement of our neighbours of the *Daily Exchange*. It will be seen that in addition to their Daily and Tri-weekly issues, it is proposed to publish a large weekly. Also a Monthly advertising sheet to be issued gratuitously in large numbers.

The Exchange, by the ability and independence with which it is edited, and by its full and reliable commercial reports, has in a very short time acquired a substantial character and popularity in this community, and taken a high position among the Journals of the country. The enterprise it exhibits, will we do not doubt, ensure it the ample success it merits.

The Oregon Farmer.—We have received, after some delay, several numbers of this interesting Agricultural serial published in that youngest star of our galaxy of States, the far off Oregon. It is conducted with spirit and judgment and indicates both by the fact of its publication and by the information it imparts relative to Agriculture and Horticulture in Oregon, that infant state is destined to rank with and even above many of the older sisters of the confederacy in those sciences.

☞ We have received the first No. of *Sands' Real Estate Register*, a neatly printed sheet devoted principally to the advertising of real estate, in the sale of which Mr. Sands, proposes to engage extensively. It is also designed for general advertisements, and will be issued four times a year for ten cents, or oftener as circumstances may require.

The Maryland Agricultural College.—At a meeting of the Trustees of the Agricultural College, convened on the 5th of April at the office of the *American Farmer*, the President and Register were authorized to advertise for applications to fill the several Professorships. The appointments will be made in July. It was also determined to open the Institution in the early part of September. The cost of board and tuition, covering all charges in all the departments, was fixed at two hundred and fifty dollars per annum.

New Flower and Seed Store in Baltimore.—We are happy to inform our readers that Messrs. John Feast & Son, have leased the premises on the N. E. corner of Fayette and Calvert streets (forming, heretofore, part of the lot occupied by Wm. Guy) and have commenced the erection thereon of a handsome conservatory, beneath which will be a commodious store for the sale of every variety of seeds. Being opposite to Barnum's Hotel and nearly opposite the Gilmor House, this establishment, when completed, cannot fail to attract not only the citizens generally, but the numerous strangers who visit this great commercial centre.

The Peach Crop.—Our information regarding the effects of the sudden changes in the weather during the past month and of the severe frosts that accompanied them, is very discouraging to any expectation of a full crop of peaches. The reports so far from most parts of Maryland, Virginia and Kentucky, are that the blossoms have been destroyed.

THE SHEEP CONTROVERSY, &c.

We are pleased to have the sheep question, the pedigree question, the question of races and breeds, of deep and shallow ploughing for wheat, and any other of sufficient interest discussed in our pages. We are very desirous of having agricultural things stirred up generally. We suggest respectfully that the sheep question be closed now in accordance with the recommendation of our friend, *Patuxent Planter*, or if preferred, by the due discussion of a saddle of *Merino* from Culpeper, of *Cotswold* from Clarke, and of *South Down* from Loudon, by way of variety—though our friend Dulany seems to think that in a controversy like this, the South Down needs no defender. This test might be applied somewhere within a short walk of the *American Farmer* office, and we can promise if the whole matter be properly arranged, a large committee of disinterested judges. We would then have a practical solution of *one* point involved, which would leave all hands in a good humour for determining the others. Our Kentucky correspondent will please be on hand, and *Patuxent Planter* have a speech ready.

P. S. Since the above was written we have a long communication from Col. Ware, in reply to Mr. Wallack. As the Col's. Kentucky ally was a head of him, we hold it under advisement.

☞We have received two marked numbers of the *American Agriculturist*, directing our attention to the words of the article to which we made allusion in our last number, and also to another previous article on the subject of Tobacco culture. In writing upon this subject, we quoted the *Agriculturist* as recommending its readers "to sow their tobacco seed the first week in March, and plant out about the last week of the same month."—This quotation was from memory, and we take pleasure in correcting its inaccuracy by giving the exact words of the recommendation, as we find it marked in the number sent us :

"*Tobacco.*—Prepare and sow beds at the South, from the first to the middle of the month (March.) Transplant former sowings late in the month."

The advice was intended *for the South*; and not the seed sown early in March, but previous sowings were to be planted the latter part of that month. This explanation is due to the *Agriculturist*.

We have only to remark that the term "South" is a comprehensive one, and we certainly do not deny that planting may be done *somewhere* this side of the equator at that period. But we call ourselves in Maryland "South" and "Southern," and the time named being full two months ahead of us, does not admit of general application at the South, as we understand it. As to the other point, if we admit that tobacco may *somewhere* be planted the last week of March, surely no part of the same month is a *proper* time for sowing seed for the same latitude, except by way of exception in case of failure.

The other article to which our attention is called, is carefully prepared and well written, but our cotemporary will pardon us for saying that, in our opinion, it is obnoxious to the criticism that it is made up at second hand : that the writer himself wanted a *practical* knowledge of the matter of which he undertook to give information to others. To illustrate this remark, we call the attention of tobacco planters to that portion of the essay which treats of the management after stripping and tying. It is included in this quotation :

"The hanks should be carefully bundled in double courses, butts out, and tips in, and lapping. The bundles should be kept covered until the butts are dry, and then boxed for market."

This is *all*, be it observed, *every word* that is written in the article of four columns of a large quarto, on the whole management and preparation for market after stripping and tying, in reply to "numerous calls for information" from novices in tobacco planting. We submit that it is not possible that an intelligent writer, who *of his own experience*, knows any thing at all of the subject, could have written such an article. And our commentary is, that he only who knows practically what he writes, is capable of giving practical instruction to others.

WORK IN THE GARDEN.

MAY.

The mistress of the Household, within whose province, according to our theory, the Garden lies, can do much for agricultural improvement, by making this little allotment a model of high culture. While thousands think high farming a dangerous experiment, a well managed garden, highly manured and deeply dug, and carefully and neatly tended, bears constant witness to the profit as well as the pleasure of that sort of culture. We do not advise the farmer to apply garden culture to his farm, but we are sure that a very considerable tendency and approximation in that direction would greatly increase his income and his interest in his farm. Let the wife then have every facility in improving and working her "model farm," and the husband admire, enjoy and imitate her handiwork.

It is very necessary to be prompt now in getting in all the main crops of the garden.

Melons.—You will not fail of course to have a supply of the delightful melons which our climate affords. As we suggested last month, an abun-

dance of finely rotted manure should have been already applied to the hills and covered up with earth. Now the soil and the manure should be thoroughly mixed and the seed planted. The water-melon requires a very light soil to grow it successfully. If planted in a lot or in field culture, the crop should be planted on sod ground. Two furrows should be thrown together, making a list; this to be checkered at the proper distance for the hills, and the middle not disturbed until the vines begin to run. This green turf is very useful to keep the worm from the young plants. Use seed very liberally.

Cantelcupes should be treated in the same way, but do not require so light a soil.

Beets, Parsnips, Carrots.—Sow the seed of late crops. Thin out and work carefully early sowings. They can all be transplanted when necessary to fill up vacant spaces.

Peas and Beans.—Continue to plant these at intervals.

Lima Beans.—Have a crop of this fine bean sufficient for summer and winter use. Bear in mind that they are getting into common use for winter supply.

Tomatoes.— The same remark is applicable to this very valuable and productive vegetable. Not many years since it was scarcely known, now it is almost as necessary as the potatoe to a properly furnished dinner table. There should be an ample supply for summer and winter use. Set out plants this month.

Celery.—Sow seed now for main crop of celery, in a rich, well prepared bed.

Egg Plants.—Plant out these in rich soil this month.

Roasting Ears.—Make plantings of roasting ear corn every two weeks.

Cucumber, Cymblin, Squash.—Plant seeds of all these in hills, with plenty of rich compost.

Cabbage, Cauliflower, Broccoli.—Sow seeds of these for late crops. Keep the early crops well worked.

Brussels Sprouts and Kale.—Seed should be sown to be planted out in July.

Pot, Medicinal, Aromatic and Sweet Herbs.—Seed of all these should be sown.

Red Pepper.—Sow seeds of red pepper to be planted out in June.

Weeds and Grass.—Keep these down in all parts of your grounds

FLORICULTURE—May, 1859.

Geraniums, Cinerarias, Calceolarias, Lantanas, &c., will exhibit at this season a great mass of bloom. Remove all plants that are not in bloom, and that are sufficiently hardy, into the open air, and thus give space for the finer specimens as they begin to bloom. By a slight shade in the middle of the day, in sunny weather, Geraniums may be kept a long time in perfection. It is the best plan, however, to harden plants, as a general rule, in frames before placing them immediately in the ground, and in so doing, all that is requisite is to protect them from cold rains and frost.

Now should begin the operation of preparing plants for next season's blooming, by repotting, heading in and starting with a slight bottom heat, Euphorbias, Poinsettias, Gesnera Oblonga, &c.— Twining plants, as Stephanotus, Echites, Allamanda, &c., should be given warm berths, so as to start with early vigor.

Camellias should now receive a liberal supply of water, and that, too, syringed over the leaves. Near the close of the month, place them out of doors, in a cool, shady spot. *Chinese Primroses* (double) should be propagated by cuttings. Seeds of the single sorts should be sown for next year's bloom. *Heaths* may be put into larger pots and in a frame, and protected from hard showers. *Chrysanthemums* we have spoken of elsewhere in the present number. *Pelargoniums* now coming into bloom, should be watered prudently, and if the green fly appears, fumigated. *Fuchsias* should be kept where the hot sun will not strike them, and watered at times with liquid manure. *Gladiolustes, Tuberoses, Carnations,* and *Picotees,* should be planted out. Perennial plants may still be removed with safety. *Roses* may be planted out during this month, and to those not heretefore pruned, that omission should be supplied forthwith.

BURNING REFUSE WOOD FOR ASHES.

"Can you or any of your readers give me any information about burning ashes from refuse wood? The Timber getters from Maine have been through our forest cutting ship timber and have left a very large quantity of wood, that cannot be used for any other purpose.

I have commenced cutting and logging and intend burning during Winter months—I understand this business is pursued in some parts of North Carolina."

King William Co., Va,, April 3rd, 1859.

Will some of our friends in North Carolina or elsewhere do us the favor to answer the above inquiry from an esteemed correspondent.—*Eds.*

Gas Tar.—We have a communication from Alleghany county, confirming the experience of our Annapolis correspondent in the use of Gas Tar upon peach trees. The writer has used it frequently (thinks it should be used once a year) and his trees have not been injured at all by the application. We have no reason at all to suspect the good faith of our correspondent, except that he withholds from us his name. He should not expect us to be sponsor for his statements, without some evidence that he is willing to stand by them himself.

Chrysanthemums.—A writer in the *Florist and Fruitist* for March, whose communication accompanies coloured illustrations of two of the finest new English varieties of Chrysanthemum—"*Golden Queen of England,*" *and* "*Prince Albert,*" says: "I do not th ink we have gained much in the way of cultivation. The best time for striking cuttings is, by many said, to be November; but some of the finest plants at the last Shows were, I believe, from those taken off in April, and even May.— There can be but little advantage in autumn struck cuttings, unless they are to be kept growing all the winter—as some advise. It cannot be too strongly impressed on growers, that the Chrysanthemum is a very gross feeder, and that consequently, if you grow it in a small pot, you must supply continued fresh nourishment—not only watering it well every day, but giving it considerable doses of liquid manure."

[From Hovey's Magazine of Horticulture.]

MANAGEMENT OF LAWNS.

No feature of a country residence is more important than a good lawn. Without this, a rural home is sadly deficient, however numerous and costly its other decorations may be. A fine house, rows of thrifty trees, flower-beds and vases and statues are all very well, but the eye does not feel satisfied unless these embellishments rest upon a broad base of smooth turf. Flower borders are desirable in their place, but if one's grounds are filled up with them it is difficult to keep them in a state of neatness; and even if kept in the best condition, the eye sooner tires of their daily view than of a simple, quiet lawn. The prevailing expression of the grounds of a country home should be that of *repose*, and that expression is interferred with if the grounds are devoted largely to flower-beds. The flowers themselves are gay and exhilarating, and the sight of extensive parterres suggests the thought of the time and labor necessary to keep them in good order.

Not the least argument for lawns is the permanence of their beauty. In spring the grass shoots up almost as soon as the snow-drop and crocus appear; and if the soil has been well prepared, the lawn in midsummer is almost as in the spring; the fragrance of its frequent mowings is more delicious than the "extracts" of Parisian perfumers; the sight of children playing on the velvet turf, or of the shadows of graceful trees stretching across it, is worthy of a painter. The winds which despoil trees and flowers of their beauty, and the frosts which blight them, leave the grass unharmed. And in autumn, amid falling leaves and prevailing gloom, it retains its cheerful verdure until hidden by the winter snows.

There is an air of refinement in a well-kept lawn. It distinguishes a place at once from the uncultivated wilderness of nature—it speaks of the hand of taste which has fenced in this nook from the common earth, smoothing down its roughness, heightening its native beauty, and still watching over it with affectionate care. It links the spot by association with the elegant and happy homes of other lands and other times.

If, then, there is so much interest attached to lawns, it is important that they be well made, and afterward well cared for. A good lawn is a work of art—it does not come by accident. In some cases the first work to be done in making it is draining. This will certainly be needful, if there are any wet springy spots in the ground, or if the subsoil is cold and stiff, and retentive of moisture. The finer grasses will not thrive in a wet soil, but mosses and sorrel will usurp their place. The trees, shrubs, and plants set out upon it will lead a miserable existence, if they do not die outright. And draining should be followed by a thorough breaking up of the subsoil—the work to be done with a plough if the space is large, with a spade if small.

The principal reason why most lawns turn brown in summer is that the grass has only a thin surface soil in which to extend its roots; and, as soon as that becomes dry, the leaves must of necessity wither. Trench that soil, and the grass will send down its roots below the reach of drouth, and will flourish in perpetual green. Manuring should go along with trenching. It is not enough to enrich the surface, for, though that may cause the grass to start well in the spring, it will not insure its freshness throughout the summer. If manure is incorporated finely with the whole body of the soil, it will improve its mechanical texture, and furnish food to the grass and whatever else is planted in it.

The importance of this thorough preparation of the soil can hardly be over-estimated. Two often it is entirely neglected. Most persons, in constructing rural homes, expend their means on grand houses, outbuildings, fences, equipage furniture, and the like—leaving the work of preparing their ground for horticultural operations for the last thing; it is then done in a hurry, and of course imperfectly. Trees are planted, but do not grow vigorously; grass seed is sown, but it comes up only in patches, and turns brown in summer. As the proprietor afterwards walks through his grounds, amid his parched and barren grass plots and his dying trees, he exclaims, bitterly, "And this is rural life! this the Arcadia of which I dreamed! The whole thing is a nuisance!" We repeat it, then, that this thorough foundation-work is of the greatest importance. He who does it well, need seldom sigh for the "weeping skies" of England to keep his grass verdant.

The ground being well broken up and enriched, it should then be raked smoothly, and the roots of all weeds exterminated. If the space is large, it should be sown with grass seed. Red top and white clover make an excellent turf—two quarts of the latter seed to a bushel of the former.—Some person prefer blue grass to red top, thinking that it makes a finer and closer turf, and withstands drought better. It improves either mixture to add a small proportion of "sweet scented grass," for the sake of its fragrance when mown. Sow liberally, at the rate of three bushels to the acre, choosing a still day for the purpose, and raking lightly afterwards. A roller passed over the ground completes the operation. If the space is small it may be covered at once with sods cut from the roadside or common. Care should be taken, however, to select turf free from weeds and coarse grasses. Stretch a line across it, and with a sharp spade cut the sods into strips a foot wide, roll them up in balls, and carry them to the spot where they are to be used. Then begin on one side of the lawn to unroll them, matching the edges neatly, as a lady does her carpet, until the surface is entirely covered. Go over the whole with a turf-beater or an iron roller, and the work is done.

But a lawn once made will not take care of itself. It should be mowed once a fortnight, and when it borders on walks, carriage roads, or flower beds it should be kept neatly clipped with garden shears. For mowing small surfaces, nothing is better than the English lawn scythe, which cuts closer and smoother than the common narrow field scythe. For larger grounds, it is advisable to use a lawn mowing machine, which does the work better than it can be done by hand, and much more expeditiously. A roller should be passed over the sward after every mowing. Once in two years a lawn should receive a light dressing of old manure or guano; and, every third or fourth year a little fresh grass seed should be scattered over it, to supply the place of any roots which may have perished.

Our lawn proper is now made; but we wish to say a few words about the arrangement of trees, shrubs, and plants upon it. In determining the

proper position of trees, it has been recommended, by high authority, to throw a bushel of potatoes into the air, at random, and then to set trees wherever the potatoes drop. This advice was given to enable young planters to avoid the formality of straight rows and equal distances. But there is no need of such child's play. Simply to plant without any design or meaning whatever will not make a scene natural and graceful. Every tree should be set with a definite purpose, and all may be so arranged as to seem at home just where they stand. No universal rule can be laid down for the arrangement of grounds—each place demands its own treatment—yet there are certain general principles which should always be observed.

Obviously, the outskirts of a lawn should be so planted as to hide disagreeable objects. Why should your eyes and those of your visitors be daily pained with looking upon the rear premises of your slovenly neighbour, or upon your own barns and outhouses? A few trees skillfully disposed would conceal them. Why should your division fences be thrust continually upon the sight? They suggest limitation and restraint; they perpetually remind one of the comparative pettiness of the beautiful scene around him.—Hedges and clumps of trees, set in flowing lines near the margin of the premises, would keep such fences out of sight. The more largely these screens are composed of evergreens, the better. In planting the boundaries, the largest trees should be set near the fence, and smaller trees and shrubs running out and dispersed over the ground within.

It is sometimes objected to this manner of planting the outskirts of one's grounds, that it is unneighbourly and exclusive. "Leave your grounds open on every side," it is claimed, "to the inspection of the public; let every passer-by see and enjoy all that you possess." But must we not, also, throw open our houses to gratify the public curiosity? We beg to know whether a man may not give at least a portion of his grounds so much privacy that his family can resort to them frequently without being gazed at by every street-goer? Is not a lawn more home-like, if it is partially screened from the dust and publicity of the highway? Besides, to say nothing about the need of protection from cold winds, there are few residences so complete in all their appointments that their effect is not enhanced by a partial concealment, the imagination always conceiving something better of what the eye is not permitted to behold. These things being said, it should also be considered that the proprietor of a pleasant country place owes something to the public.—There are many persons of fine rural tastés who yet have not the means of gratifying them in lawns, trees, and flowers of their own; let them have a glimpse, from the roadside, of your beautiful grounds, and let the gate of your premises be always open at their call. The public taste generally will also be much improved by the daily view of well-kept grounds. And where is the man so selfish as not to find happiness in thus ministering to the happiness and the improvement of others? We hold therefore, that, while one's premises should be belted with trees and shrubs sufficient for shelter and privacy, they should also be open at certain points to easy observation from without. Every visitor, too, fond of cultivated rural scenes, should be admitted to the grounds with a hearty welcome.

The position of trees on a lawn, and their number, will depend much upon the extent of the grounds. In a large establishment, many large trees may be planted, both singly and in groups; but in this country most lawns are small, and large trees must be confined chiefly to the boundaries. In planting a lawn, the object is not to see how many trees it will conveniently hold, and then to set them out in rows, like an orchard.—The beauty of a lawn consists chiefly in broad reaches of smooth, unbroken turf, surrounded by a waving border of pleasing foliage, with here and there a graceful tree casting its shadow across the velvet sod. As the lawn is generally a highly dressed scene near the house, the trees should be few, and those of the finer sorts, with neat bark and leaf. A few shrubs may find a place on the lawn. Those of good form and foliage may stand singly, as miniature trees; others may be set in masses. And here there will be room for the display of taste in the arrangement of colors. We have seen a fine effect produced by mingling the dark green of the European Strawberry tree with the gray hue of the Missouri Silver tree and the purple of the Purple Berberry, the whole blended and softened by the lighter shade of other shrubs.

Our lawn will not be complete until it is enlivened, here and there, with flowering plants. We will not cut it up with large beds, and crowd them with straggling, ill-assorted specimens.—Herbaceous perennials and annuals we will confine chiefly to a little flower garden kept by itself on one side of the grounds and mostly concealed from the lawn. There, we will reserve a place for the old-fashioned plants, which our childhood so much loved—peonies, flower-de-luce, columbines, pinks, poppies, hollyhocks, morning glory, cockscomb, larkspurs, sweet-william—but there's no end. These, with their waxing-waning beauty, would not comport well with the highly finished character of the lawn. But we will cut out circular or other graceful figures in the turf near the walks, and fill them with plants of neat habit, and which flower throughout the summer. Among these, we need hardly say the best are verbenas, petunias, geraniums, lantanas, heliotropes, and perpetual roses. Several of these beds—those especially which border the most frequented walks—we will set with early flowering bulbs, which can be taken up, or have their tops cut off, after their period of blooming is passed, to make room for the bedding plants. In this way, a succession of flowers can be had from early spring to late autumn.

A lawn so made and planted should be well cared for. Weeds should not be allowed to invade it; the grass should be kept short, and the flower beds and walks always kept neat. Such a lawn will afford continual satisfaction.

To Hybridize Roses.—The anthers having been removed from the flowers, the pollen-bearing flower is inverted and spread over it, and they are tied fast together by woolen yarn, and in such position that when the pollen is ripe, it will fall on the pistils below; and this will happen generally at about the right time for fecundation. The inverted flower acts as a cover and protection against insects and floating pollen. The flowers may be left in this state for a day or two, and they may then be separated. Attach labels to every flower thus manipulated. This plan may be adopted in doors or out.—*Prof. Page, in Hovey's Magazine.*

THE SUGAR BEET.

We can, from our own experience, endorse what is said in the following by a correspondent of the Connecticut *Homestead*. The cultivation of roots for the early spring feeding especially, of stock, should be more common, and the sugar beet is one of the best of roots, very productive, keeps well, and is easily grown. It is especially good for milch cows. The seed should be planted in drills just wide enough apart to be worked with a single horse, and may be planted any time in the month of May. The ground should be deeply ploughed—subsoiled if possible, and well manured.

I believe I was the first one to raise the white sugar beet in Connecticut. I then took the old *New England Farmer*, a first rate paper, edited by T. G. Fessenden. Seeing mention made in it of their being raised somewhere near Boston, and that they were very productive, I sent then for some seed and gave them a trial. I liked them very much, and continued to raise a small patch every year. When the potato rot broke out I raised them in larger quantities. Since then I have tried every kind of root, but my main reliance has been upon the sugar beet, and taking all things into consideration, I am confident there is no root so profitable to raise for stock as the *white sugar beet*, and for the following reasons:

Their easy cultivation.—It can be sowed early, as a little frost does not injure the young plants.—The seeds must be soaked, and they then come up quickly, and strong enough to keep ahead of the weeds, in this respect having a great advantage over carrots and parsnips. The young plants bear transplanting to fill vacancies, and the thinnings make the best greens for the table. If near a market you can sow thick, and sell the greens for fifty cents a bushel or more. It is not subject to the attack of any insect, and it is not particular about the weather. Provided the land is strong it is more indifferent than any plant I know of to extremes of wet or drouth, and with common care you are nearly sure of a crop.

It is a cleaning crop, and an ameliorating crop; they will do well on new land, and I have raised them on one piece of a quarter of an acre for ten successive years without any diminution in the yield. A great outcry is often made about the trouble of raising this and other root crops, but I have scarcely ever met one of these loud talkers about trouble, who when asked if he had ever tried it would not answer—*No*.

Their good keeping qualities.—Under favourable circumstances, sugar beets will keep till the middle of May or first of June. They deteriorate less by keeping than mangel-wurtzel, or any other root I know of, and retain to the last their sweetness and nutritious qualities.

Their feeding qualities.—All kinds of stock prefer them *raw*, which is an item of no small consequence where the expense of labor and fuel for cooking roots is considered. It is even unnecessary to cut them, for they are so large there is no danger of swallowing them whole, and stock seem to enjoy scooping them out, and of course do not devour them as hastily as if they were sliced into pieces which they could swallow without chewing. There is not much danger of cloying cattle with sugar beets, but is better to begin with small feeds, and gradually increase the quantity. Nothing will make a cow give a greater flow of milk or of a better flavour. It will not be as rich as that of a cow fed on grain or oil cake.

I am not an advocate of the exclusive feeding of roots any more than of feeding hay alone; but if circumstances demanded it, I have no doubt I could winter a lot of cows, and bring them out in better than common condition in the Spring on plenty of beets, and five pounds of hay each a day, instead of twenty or twenty-five pounds of hay a day, which is the usual quantity, and no roots. But one peck of beets a day with hay, will keep a cow in finest order.

It will prevent constipation of the bowels which is the cause of most of the diseases to which animals are subject, and instead of having their hides harsh and dry with staring hair, their skins will keep smoth, elastic, and mellow, with that soft, unctuous feeling to the hand which is a sure sign that the crittur is thriving.

Store pigs and breeding sows (before they litter) will keep well with but little else than sugar beets. I once wintered some pigs exclusively upon them, *fed raw*, and never had shoats do better or make better hogs.

Their great yield.—The average crops of potatoes in former times were about two hundred bushels to the acre, whereas the average crop of sugar beets under similar circumstances would be over five hundred bushels. If high cultivation has given four hundred bushels potatoes to the acre, under the same conditions sugar beets would yield ten hundred bushels or more. Grass land is better than the average, which yields two tons of hay to the acre. A low average crop of beets is five hundred bushels, which at fifty pounds to the bushel is *twelve and one-half tons to the acre.*—Suppose that next year you mow one-half an acre less, and sow half an acre of beets in its place. I ask you, brother farmer, which you would rather have on hand to feed to your stock in the cold days of January, when "the cold strengthens as the days lengthen," twenty tons of hay and no roots, or nineteen tons of hay and six tons of sugar beets in the place of the other one ton of hay? Which will make your stock turn out better in the Spring?

Try it one year, and you will need no prompting to continue it as long as you live.

MANAGEMENT OF MEADOW LAND.

I have seen hide bound meadows permanently renovated by a shorter process than even that described by your correspondent D. I remember witnessing the proceeding while in progress on a dairy farm in the vicinity of Philadelphia, on which the tenant was restricted by a most binding clause in his lease from ever breaking up a meadow land of the holding, under any circumstances whatever; but he having obtained permission to make a single experiment, the owner of the land was so well satisfied with the result, as to renew his permission whenever it was sought for by the tenant, who was a sagacious Scotchman, and an eminent practitioner in the "auld country."—The mode adopted was the following, and in the carrying out of which no expense or labour was regarded as too great, while the manure of a dairy of forty cows afforded the means of reclaiming even a waste.

After feeding the meadow until late in August, it was then covered with long manure from the barn-yard, which was turned under to the depth of the staple of the soil, and the land sown with winter rye, with a plentiful allowance of seed, the crop being mown in the spring following as feed for the dairy cows in their stalls, the plough following as the land is cleared of the crop, and when all was gone, then a regular stirring and working of the soil took place, with a careful cleaning, giving space between each turning for the growth of seed weeds, which were destroyed by being turned under, and when it was as "clean as a garden," the surface was spread with a covering of compost that had been prepared for the purpose, which was turned under as slightly as possible, and the land was then sown with the choicest grass in abundance, with the certainty of a full mowing crop the ensuing summer.

There can be no doubt that poverty and exposure to the elements are the cause of a very great proportion of the maladies with which our stock of all kinds is affected, and nothing would be so gratifying to a humane man as to remedy these evils, or be so easy of accomplishment, provided he be endowed with the blessings of the will and the means.

JACOB C. ALCOTT, *in Boston Cultivator.*

RATIONAL CULTURE OF MEADOWS.

Translated from the FLORE DES SERRES, *published in Belgium.*

BY ONE OF THE EDITORS.

[The reader will find the following article, translated from a celebrated periodical published in the French language, well worthy perusal.]

No plant, during the continuance of its existence, depends upon another; * all exist, on the contrary, by themselves, and pass through the phases of their growth without interruption as long as they meet with the elements necessary to their development; they necessarily cease to live the moment that these elements fail them.

The plant, from its germination until the ripening of its seed goes through three principal phases: infancy, when the leaves principally develop themselves, which are the organs of vegetation; adolescence, or the epoch of flowering; finally, the age of manhood, that is to say, that in which it ripens the seeds, by the aid of which it reproduces itself.

We have established these principles at starting, because they form the basis and point of departure of the rational culture of meadows.

The existence of the plant is intimately united to certain conditions, the modifications of which have upon each occasion, as a consequence, the weakening or the complete decay of the individual. That consequence will be produced the more easily when the structure of the plant is delicate; that is to say, when its development depends on conditions very susceptible of modification. No one has better occasion to convince himself of this truth than the botanist, who explores attentively the Flora of his country. How often does he not see certain plants disappear and return, which, whether because of their rarity or because of their more interesting characters, invite him to study them more especially? He believes that he will find them in the same place where he gathered them the year before, but they have disappeared. However, his experience consoles him; it tells him that this disappearance is but momentary, he is sure to find them again some years later, at the same place, or at a little distance from it. Let it not be imagined, nevertheless, that the place thus abandoned by the first will remain empty, it will be, on the contrary, immediately occupied by other plants, but which are endowed with different characters.

What are the causes of this phenomenon which incessantly presents itself in natnre, and which cannot escape the attentive observer? They are many, of which the principal are the following: Sometimes it happens that a stronger plant, the seed of which had been carried by the wind, usurps the soil and smothers that which occupied it; or else a plant finds the soil so suitable that it propagates itself beyond measure, absorbs all the nutriment and occasions the destruction of all others. A plant often disappears because of the vicinity of other sorts more vigorous, and which sustain themselves from nearly the same elements; deficiency of nourishment is then, as in the following case, the cause of its disappearance. A plant disappears of necessity, when, after some years of existence, it has exhausted the ground about it. Another cause which sometimes determines the disappearance of plants, is the great modification of the chemical constitution of the soil.—Finally, the shade thrown by trees makes plants perish that require to be exposed to the free air. So it is that from an opposite cause plants habituated to living in the shade, disappear after the removal of the trees.

These data indicate sufficiently the course to be pursued in the culture and maintenance of meadows.

When a meadow is good, that is to say composed of good nutritive grasses, the effort should be to preserve them there; which is not possible except by applying the principles that we have just established. It is in the nature of the plant to construct its organs invariably of the same elements, it results thence that a plant cannot live in a soil where these elements are wanting, or when they are found in such conditions that they cannot be absorbed by the roots. Hence the necessity of enriching the earth and of re-potting plants whenever their puny condition indicates the exhaustion of the soil.

In fact, the decline of vegetation can be arrested for some time by the assistance of liquid manures, but at length this palliative becomes powerless, and we are obliged to give back to the land the lost inorganic elements either directly under the form of improvement of the land or by waiting until a new portion of the soil shall become soluble and susceptible of being absorbed by the roots of plants, which is what was done of yore, by turning out to fallow, land that had borne any crop whatsoever.

If one plant sustains itself invariably from the same inorganic elements, it is not less true that the different sorts of plant require others, or absorb them in different proportions. Hence has

*Except, of course, the parasitical plants as well as certain others which live upon vegetable decompositions, or which need the shade and protection of plants more expanded.

resulted the system of culture by alternation of vegetables almost entirely employed in our days. This system is based upon the fact that if the soil has been exhausted by a certain crop, it may yet contain the elements fit to give sustenance to another sort. Nature follows this rule we know in meadows. There the ordinary eye never sees anything but grasses, but the botanist knows very well that they are never the same, and that they vary every year.

The English writers on agriculture were the first to understand this truth, they know that when a field has been seeded with a single kind of graminaceous plant, the soil is exhausted more promptly than if a mixture of different herbs were sown. These mixtures of graminaceous, with which are associated leguminous plants, are not only more agreeable and more profitable to cattle, but their product is more considerable, because all the plants, not being restricted to the absorption of the same nourishment, arrive at perfection.

The practice of the English is the perfect imitation of nature, it is then the most rational.

In fact, we never meet in nature with a meadow formed of one single kind of grass. Modern chemistry has afforded us many lights upon the nature of the elements that constitute the nourishment of plants, and if certain doubts or errors upon this subject still exist they must not be attributed to science, that is always true, but to prejudices, of which unhappily we are not always willing to divest ourselves. Thus it is not correct to believe that the sap is elaborated and modified in the leaves, and that it re-descends thence in the bark down to the roots. In fact, that is not possible. Doubtless the carbonic acid is decomposed in the leaves, but that act has no direct connection with the nutrition of the plant, it has as its sole object the preservation of the leaves for the purposes of transpiration. This truth will one day be generally recognized, when physiology shall have furnished the proof that the functions of leaves can only consist in transpiration, and that, in order to be able to fulfill these functions during their continuance, it is requisite that the cells of the parenchyma should be continually renewed.

To return to our subject, we will say then that we cannot cultivate a meadow rationally if we do not know the nutritive elements of the plant. Our researches and our studies have lead us to recognize that there exist two kinds of food for plants; the first results from the combination of the humic acids with ammonia. These are the subtle salts which pass away by different degrees, and finally are entirely decomposed. The roots absorb them in their nascent state; they are the source of the proteine and of the carbon contained in the plant, and constitute an universal aliment for all vegetables. Besides this universal food, there is a special one to which plants owe their specific qualities; this consists of the salts which result from the combination of inorganic elements with carbonic acid and the humic acids, which plants absorb according to their wants or following their individuality. The existence of vegetation is specially attached to these last; we can then understand how great must be the influence of the chemical composition of the land upon the prosperity of the grasses of the fields, and to what degree it imports the proprietors of a meadow to know these principles.

The graminaceous plants which form the base of meadows show this in particular, that they seek the silicious element for food in great amount. We know not how it enters them; opinions are divided upon this point; nevertheless, it is probable that the silex, serving as a base, unites itself to the apocrenatic acid and is absorbed under that form; perhaps it unites itself to the potash also. However it may be, it would not be necessary thence to conclude that the grasses absorb all the silex in the same proportion and that they do not need other inorganic elements; on the contrary, they absorb potash, soda, calcareous earth, magnesia, iron, alumina, phosphoric and sulphuric acid, chlorine, and manganese. All these elements should be found in state of perfect solubility, otherwise plants can derive no advantage from them.

The nutritive elements contained in manures are nevertheless, not all in the state in which they might be absorbed by the roots, but they become soluble under the influence of the air, of humidity and of the reciprocal action of the different elements upon themselves.

In the culture of artificial meadows to last one or two years, it is most advantageous to sow only the improved grasses, as the English practise, for they yield a more abundant product; tall oat grass (*arrhenatherum avenaceum*), timothy (*phleum pratense*), perennial rye grass or darnel and Italian darnel (*lolium perenne et Italicum*), the red clover and lucerne are the best herbs for the formation of artificial pastures. The *Alopecurus pratensis* (meadow fox-tail), which some recommend, is of no use, because it is two precocious. The English frequently sow the perennial darnel; they have many varieties of it, which bear the name of their discoverer or of the locality where they were obtained, but they require good land. They must never be sown alone.

Conductors of agricultural journals and single writers often publish catalogues and recipes of mixtures for seeding meadows. Nothing depotes more want of consideration and inexperience on the part of those who publish these lists. The names of grasses are seen therein, which it is impossible to procure in sufficient quantity alongside of others which do not grow even in the same meadow. These lists are then of no use in practice. Better abandon the production of a sod to nature than lavish useless expenditure in this way.

If we wish to seed a permanent meadow, the surest way is to sow the herbs that grow in almost all soils, to treat the land well, and to wait until nature herself replaces the kinds that have disappeared. Among the grasses which are satisfied most easily in all soils, we would cite the perennial darnel, or rye grass, the rough stalked meadow grass (*poa trivialis*), June grass (*poa pratensis*), meadow fescue (*festuca pratensis*), meadow soft grass (*holcus lanatus*), Herd's grass or timothy (*phleum pratense*), the red and the white clover and lucerne. Little by little we shall see that other grasses, other herbs, the seed of which the wind brings from all quarters, will establish themselves among those that have been sown. These new intruders are not always the same in all meadows; they vary according to the chemical nature of the soil, its degree of humidity, and its elevation above the level of the sea; we will only observe that in a well managed meadow the plants called weeds are rarest. If, for example, the soluble silicates have been exhausted by the good grasses,

It is very natural that they should yield their position and give place to other vegetables that are more moderate consumers of the silicious salts.

Certain grasses are very sociable and form very extensive turfs, for examples, the annual spear grass (*poa annua*), and the darnel, but the greatest number are willing to grow associated with grasses of other sorts. That depends upon the difference of the proportions in which they absorb their nutritive juices, or else upon the fact that they absorb elements which are too slightly mingled in the soil for a large number of individuals of the same species to procure nourishment from them. We have never been able to keep the Italian darnel long in the same spot, which is one of the best forage plants; but the seed propagate themselves with astonishing facility, and in a short time they may be seen shooting forth sporadically in all the neighbouring meadows. If nevertheless it does not find good land it disappears from the country forever. In the best soils the darnel often becomes modified and so alters in appearance that it is no longer recognized by its botanical characteristics. What is astonishing is that in none of the lists that we have been able to consult have we observed the barley grass (*hordeum pratense*, huds.) which some call sea barley, and others rye barley. With us, this excellent grass which appears to be rare elsewhere, may be regarded as a sort of vegetable areometer, which according to the frequency or the rareness of its presence in a meadow, may afford the measure of the degree of fecundity and also of the good quality of the land. For let a meadow where this barley is found be a little neglected and this grass disappears, as we have often observed.

These examples evidently prove that the grasses, especially the good sorts, are more difficult to keep up than is commonly thought, and consequently require careful culture, without which they disappear and are replaced by sorts of inferior quality, more thrifty, it is true, but also less nutritious and less productive.

In the culture of meadows, it is not sufficient to know only how to produce good herbs, but also how to derive the greatest profit from them. This qualification supposes some acquaintance with the physiology of plants. We have seen above that grass has its age of infancy, its adolescence and its age of maturity; these three states pass insensibly from one to the other without any abridgment. Nevertheless we know by chemical analyses and comparative experiments at what age the grasses contain the greatest quantity of nutritive substances. It is when they are about to begin to produce flowers; that past, all the nourishing juices are already withdrawn from the stalk and the leaves, and there remains only the woody matter which is not assimilated. We must then mow the meadow at the moment when the greater part of the grasses is in flower.

There remains yet something to be said upon the manuring of meadows. This word manuring means in truth only furnishing to herbs the matters on which they live, and replacing by new the nutritious elements which have been absorbed.—In this sense, it is indifferent then whether this nutriment be given under the form of dung, of compost, or even of irrigation. Stable dungs are those which contain most soluble matters, but their price is too high and the use of them more advantageous in manuring fields in cultivation. Guano, Chilian saltpetre, and other manures of that category contain too much azote; the quantity that the graminaceous plants need for their growth is found naturally in the soil; it is useless, therefore, to bring them at great cost. Composts are the best manures for meadows, because when they are suitably compounded, they contain all the elements necessary to the grasses. We will cite among others, street dirt mixed with rubbish and coal ashes, the mud from ponds or from canals, &c. With relation to irrigations it is not correct to suppose that the quality of the water is a matter of indifference. We may admit it as a general proposition, that the purer water is the less fit is it for irrigations. Waters charged with slime are considered as the best for this object; there are nevertheless exceptions, for that depends upon the source whence it proceeds.

River water, in a state of perfect limpidity, is less good, and its effects will not be very sensible if the soil of the meadow is not of good quality. Water that rushes from the foot of mountains, although very limpid, often contains a great quantity of nutritive substances, which are readily drawn out by plants, and even by the earth, in proportion as the water runs upon the surface. These are principally the apocrenatic salts which are formed in the soil, and which the water holds in solution until the oxygen of the atmosphere decomposes them.

In all the plants that we cultivate, there is only one part which principally should develop itself. With tobacco, it is the leaf; in the potato, the tubercle; in the beet, the root; in the apple tree, the vine, in the peach tree, it is the production of succulent fruits; in the cereals, the peas, the beans, the seeds are what we wish to obtain; in forage plants we seek for the mass of stalks and leaves. But that is not all; the stalks and leaves of grasses, in order to be good, ought to overflow with albuminous and sugary juices. With this design the cultivator will select not only the sorts richest in juices, but also those of which the stalks are the highest and the leaves the largest, yet always having regard to the quality of the land. In meadows of the first class then he will sow: *Arrhenatherum avenaceum* (tall oat grass), *Avena pratensis* (meadow oat grass), *Festuca elator* (tall fescue grass), *Phleum pratense* (timothy), *Poa pratensis* (June grass), *et trivialis* (rough stalked meadow grass), *Lolium perenne* (perennial rye grass), *Dactylis glomerata* (orchard grass), *Holcus lanatus* (meadow soft grass); in moist meadows: *Phleum pratense* (timothy), *Agrostis stolonifera* (Fiorin, or broad leaved creeping Bent), *Poa trivialis* (rough stalked meadow grass), *Lolium perenne* (darnel), *catabrosa aquatica*. In dry meadows: *Holcus mollis* (creeping soft grass), *Lolium perenne* (darnel), *Festuca avena* (sheep's fescue), *Anthoxanthum odoratum* (sweet-scented vernal grass), *Festuca rubra* (red fescue), *Avena flavescens* (yellow oat grass), *Melica coerulea*, *Medicago lupulina* (black melick or nonsuch). Nature will then do the rest.

In order that the saccharine matter may be formed in the highest degree, it is necessary that the manure spread upon the meadow should be as little azotized as possible, and contain besides as large an amount of vegetable substance as possible. This last is converted into humic acid which then combines with ammonia, the alkalies and the other bases of manures and of the soil. These manures, mild and of vegetable origin, yield, as

experience proves, hay specifically the heaviest, whilst that which is obtained by the aid of guano and other highly azotized fertilizers is very light.

Such are the natural conditions which the culture of meadows demand. Aquaintance with them is at the present day more necessary than ever, in presence of the ever growing augmentation of our material wants.—SCHEID.

SULPHUR FOR FRUIT TREES.

There is a great disposition to jump to conclusions in Agricultural matters, and the very many absurdities that get currency are laid to the charge of book-farming. A fact is picked up by an observant gentleman, who hands it to a friendly chemist for a theory to suit, and straightway we have an addition to the Agricultural Science of the day.—Now a ten-penny nail is driven into a peach tree, and it happens that that tree flourishes, while another dies. A chemist thinks a salt of iron is formed, which poisons the insect, and nourishes the tree. Again, a gentleman finds that some favourite shade trees were injured by insects, and conceiving the idea that the enemy might not fancy the smell of brimstone, bored an augur hole and plugged the hole with a roll of sulphur, when lo! the insects emulated that bad boy in Webster's spelling book, who robbing an old gentleman's apple tree, laughed at the lighter missiles of turf and clods of dirt, but the virtue of stones being tried, came down suddenly and begged the old man's pardon.

This theory is well disposed of by Dr. Wight, of Boston, in *Hovey's Magazine of Horticulture*. Alluding to a statement quoted from one of the Agricultural papers, he says:

The above is much the same as we meet with periodically going the rounds of newspapers.—Agricultural editors are generally too well posted in such matters, to believe that sulphur could have the *least* possible effect for the destruction of the curculio, canker worm, or any other insect, when applied as above recommended. As to its remedial qualities, it possesses none whatever; it is *no* remedy in the destruction of any insect as above proposed, for the reason that the sulphur will remain the same *in quality and quantity;* no diminution of quantity takes place, for all capillary communication is cut off and *ever* remains so as long as the tree continues to stand.

Now for FACTS, showing the fallacy of boring and plugging with sulphur. About twenty-five years ago, an article went the rounds of the newspapers, saying the Shakers had tried the experiment of sulphur, and had entirely extirpated the canker worm, and saved their trees in pristine freshness. The communication stated, that, so sudden (?) was the effect, that in less than twenty-four hours scarce a vestige of the myriads was left; each had let himself down in "double quick time" by a ladder of his own construction, (of course they do, sulphur or no sulphur, all leaving the tree at about the same time to take on the chrysalis state); neighbors gathered to see the way in which young Mount Vesuvius was stirring up the inhabitants of the upper regions.

The above was a *stirring* affair in more ways than one; my neighbors read the account, and forthwith set to work on their fruit and ornamental trees; sulphur was in demand, with an upward tendency, (not by the aid of sap, however,) and results were looked for. Many a fruit tree was cared for, which was more than could have been said for any prior time since the first dibbling of them into holes as their last resting place. Some said, "sulphur was the thing;" others had *known* quicksilver to keep off caterpillars, so long as any was left remaining in the hole; in other words, till the sap vessels had used up the charge first put into the auger hole.

Determined to show the *absurdity* of such a mode of proceeding, I too set to work with both sulphur and quicksilver, carefully weighing the quicksilver in the balance distinctly sensible to the hundredth part of a grain. The holes were bored and cleared so that I might thereafter remove it without trouble, as it all laid in one globule—the holes were cemented over. These holes were opened from year to year, and the quicksilver taken out and weighed, showing no decrease from first to last. These facts I gave you, as you will notice on reference to your Magazine, Vol. XIX., p. 152. Amongst my trees selected for trial of sulphur, were two venerable elms. The auger used was of the size of the rolls of sulphur, and was allowed to penetrate to the very heart of the ancient specimens. Roll after roll of sulphur was put in and the holes plugged—one with grafting clay, the other a wooden plug. The one on which grafting clay was used soon healed over, while the other showed signs of bleeding for a length of time. This was over twenty-five years since.

Now, *mark the result*. This winter those two trees were cut down, one having been struck and killed by lightning, its mate on the opposite side must also share its fate for harmony's sake, and so give place to others planted some thirty years since, with the view of making up the deficiency.

On cutting up the butts, it was found that sulphur and hole were of the same size as when operated on twenty-five years ago. The holes had grown over and that was the only change observable.

TWO NEW PEARS.

1. *Beurré Auguste Benoist.* This valuable Beurré Pear is of recent introduction, and, according to a report in the *Revue Horticole*, it is a chance seedling of French origin stated to have been discovered "growing in a hedge near ——" and named after the nurseryman by whom it was first propagated. A short time ago we received fruit of this pear from Mr. Nicholson, of Egglescliffe, near Yarm, Yorkshire, from which the accompanying description was taken. We are informed that Mr. Nicholson, "received it from France in 1848, and that the tree is hardy, and a free bearer when grown as a pyramid; he considers it the best among all the varieties he cultivates." The fruit is of the first size, and even in outline; skin pale yellowish green, overspread with numerons grey specks, and flakes of cinnamon russet near the stalk and apex; and tinged with rich brownish red on the side exposed to the sun; altogether a very handsome fruit; stalk three-fourths of an inch long, stout, and inserted without much depression; eye small and slightly sunk in a narrow cavity. The flesh is yellowish white, fine grained, perfectly melting, saccharine

and rich, with a strong musky flavour, not unlike that of the Gansel's Bergamot; it usually ripens through November and December. The tree is of medium growth and fruitful habit, and has small dark green glossy foliage.

2. *Fladberg.* This pear is not exactly of recent date, but it is not so well known as it deserves, as it is of excellent quality, and one of the hardiest and most prolific of Pears when grown as an open standard. It partakes a good deal of the character of the Swan Egg, and appears to be a great improvement on that fine old variety. We owe the origin of this pear to the late Mr. Williams, of Pitmaston—a gentleman who devoted a large portion of his life to raising seedlings, and did much towards improving our hardy fruit. The Pear in question is of medium size, and uneven in outline; skin rough, of a brownish red on the exposed side, the other portion intermixed with yellow and green, and thickly sprinkled with brown specks; eye small, and set in a small even cavity, and has a long reflexed calyx—stalk an inch long, and set without depression, and usually reclining to one side; flesh yellowish and melting, and possesses a very refreshing juice, with a flavour resembling that of the Swan Egg and usually ripens through November and December. The tree is of strong growth and upright habit, and bears freely in a young state, producing fruit from the points of the previous years' growth. It is a very suitable kind for the orchard or for pyramid culture. *J. Powell*, in the *Florist and Fruitist for March.*

HERD BOOKS.

In the second part of the last volume of the *Journal of the Royal Agricultural Society, of England*, we find the following statements in relation to the Herd Books, wherein are registered the three most numerous and popular breeds of English cattle:

Of the Herd Book for *Short-Horns* it is said, "It was originally started in 1822, and edited by Mr. George Coates, of Pontefract, but now conducted by Mr. Strafford, Euston-square, London, as the *authentic* register of the short-horned breed of cattle from their earliest existence, or at least from the date of the earliest registers kept by the first improvers of the breed.

The number of entries contained in the first five volumes issued in the course of twenty years, amounted to 6,699.

In 1842, Mr. Henry Strafford succeeded to the editorship, and has conducted the work up to the present time. During the period ending 31st December, 1857, he has published seven additional volumes, which contain the entries of no less than 15,537 bulls, together with cows and their produce during the past fifteen years. In future the 'Herd Book will be made up at shorter intervals. It is confined to the British Isles. America, Australia and France have now their own 'Herd Books,' founded on this, the parent one, to which most of the pedigrees refer in their original descent."

Of the *Herefords* it is remarked, "It is much to be regretted that no correct pedigree of this breed was kept until T. C. Eyton, Esq., of Eaton Hall, Salop, exerted himself to collect information, and condense it in a 'Herd Book." His first volume appeared in 1846; but although he urged the necessity and value of such a work, it was not appreciated, and after publishing another volume in 1853, he expressed his intention of discontinuing it. The late W. S. Powell, Esq., of Hinton Court, Hereford, then purchased the copyright, and commenced the third volume: but his sudden death stopped the progress of the work. Breeders, however, began to see its value from the question of pedigree being repeatedly raised by those who sought to purchase, and the copyright was purchased of the representatives of the late Mr. Powell, by the Committee of the Herefordshire Agricultural Society, who selected Mr. Duckham, of Baysham Court, Ross, to conduct it. This he has done with great perseverance; and although only twelve months have elapsed since he commenced his labours, he has published his first volume (the third of this work,) and for the first time has added the cow pedigrees and their produce. The number of bulls in the two first volumes are 901; they now number 1,477."

Of the Devon Herd Book it is remarked, "It is to this indefatigable gentleman, (Captain T. T. Davy,) that Devon breeders are indebted for the 'Devon Herd Book.' He published his first volume in 1851, the second in December, 1854, and the third in 1858. It is admitted that these volumes contain a faithful report of the pedigrees of the greater number, if not all, of the best Devons The fact that these Herd Books have been republished in the United States is strong corroborative evidence of their value. In this 'Devon Herd Book,' mention is made of 29 *prize* bulls; 27 of them are descended from the bull 'Forester.' Again, there are 34 *prize* cows; 29 of these are descended from the old cow 'Curly:' both bull and cow are of the Quartly tribe of Devons."

[Correspondence of the Louisville Courier.]

KENTUCKY STATE AGRICULTURAL SOCIETY.

FRANKFORT, April 7, 1859.

Editors Louisville Courier:—The State Board have just adjourned after a laborious session of twenty-four hours. The President, Corresponding Secretary and Treasurer were all present, and only two of the Directors were absent—(and they, gentlemen who reside in the far away Green River country, and who necessarily have to be in attendance upon the exhibition of tobacco, before committees of the Society in Louisville, on the 24th of next month.

The main business of the meeting of the Board at this time was the preparation of a premium list for 1859, and the location of the next fair.

Propositions for the fair were made from Lexington, Paris, Maysville and Germantown. There was much difficulty in deciding between them, but, after long deliberation and discussion, the terms of the Lexington proposition were regarded as the best, and the fourth annual fair of the Kentucky State Agricultural Society will consequently be held in that city. The pride of the Fayette people is fairly up, and, with so liberal and comprehensive a premium list as will soon be published, the finest fair that has ever been held in Kentucky may be anticipated for next autumn, in "the heart of Blue Grass."

The time fixed for the fair is the 13th, 14th, 15th, 16th and 17th of September.

Growing crops look well in this region, and the farmers are all in good heart.

The fruit hereabout has been "scotched," but not killed. Yours, &c. G.

CALVES.

Nothing is more important to the successful rearing of stock, than that the young animals should receive a "good start" in life, and it is idle to expect a profitable return from an animal which has been half starved and uncared for during the first few months of its existence.

When we look into a farm yard and see the young calves cringing and shivering in the corners, their legs drawn together under them as if they were huddling together for sympathy, their long, rusty, lifeless looking hair standing at right angles with the body, their paunches stuffed with coarse, unwholesome, or innutritious food, until they are swelled to an enormous size, their eyes dull, dreamy and listless, and the whole general appearance impressing one vividly with the idea that there is indeed such a thing as a state of semi-existence, we do not require to be told that the owner is a poor man. Such management will make any man poor in a short time.

A large portion of the cattle raised in the United States are born in this month, and the future thrift and value of our herds depends much upon the management of the young animals during the first four months of their lives.

When in a state of nature, the calves are nourished during this period almost entirely by the milk of their dams, and there can be little doubt that when the health and growth of the calf is the principal object with the breeder, it should be allowed to run with the cow. But to very many farmers the milk is of too much value to permit this, and the calves must be artificially reared. When this is done the calf should not be taken from the cow before the second or third day, or until the milk of the dam is fit for the purposes of the dairy. We are aware that many breeders advise taking the calf from the cow before it has been allowed to suck, urging as a reason that the calf will much more easily be taught to drink if it is never allowed to get its food in the natural way. This may be true, but there is very little trouble in teaching the calf to drink after it has been allowed to run with the cow a day or two, and there is a very important reason why this should be done. The fæces that accumulate in the intestines during the latter months of the fœtal state are dense and adhesive, and voiding the excrement is at first, often attended with some difficulty. By a wise and admirable provision of nature, the first milk of the cow possesses certain laxative properties which materially assists in establishing the healthy action of the intestines, and it is very important that this milk should constitute the first food of the calf.

When the calf is taken from the cow it should be removed as far as is convenient from her, that it may not be rendered unnecessarily restless by her lowing. It should be fed entirely on new milk for a few days until it becomes accustomed to the change, when "skimmed milk" can gradually be substituted for the new.

If two or more calves are kept together they should be separated for an hour or so after they are fed, if not, they are almost certain to contract the injurious habit of sucking one another. This can be accomplished either by feeding them separately in small pens which can be closed while they are eating, or they can be tied. The latter is on some accounts the better way, as the calf which has been once thoroughly accustomed to the halter never forgets it, and will ever after be easily restrained in this way.

As soon as the grass is well up, turn into a small pasture or yard where the feed is good and provide shelter to which they can retire at pleasure. Beware of practicing a common, but fatal piece of *false* economy by putting them on a short allowance of milk. Do not attempt to wean them too soon. The young calf can no more subsist upon grass alone than the infant can live upon meat and vegetables.

Calves should be fed milk at *least* twelve weeks —*Stock Journal.*

LONICERA FRAGRANTISSIMA.

The hardy winter blooming Honeysuckle, *Lonicera Fragrantissima*, has not the beauty of some of its compeers, but then it has all and more of their sweetness, and it blossoms in December, when large, gay exposed flowers would be rent and torn by the blasts of winter. Its flowers come out coyly in pairs. Four pairs of flowers commonly produced from the axil of every leaf; and the pairs of blooms are seated on slender little stalks, just long enough to enable each little flower to expand. The flower has not a long tube, like the common Honeysuckle, but blooms within the protection of the leaf, which remains green and strong during the winter. When nearly all the other flowers have perished and gone from the parterre, and winter reigns, this little plant begins to bud and bloom, and to make merry; it does not expand its delicate waxy white blooms all at once, like its gay flaunting, but still handsome friend, Jasminum Nediflorum; but from November it is never without its charmingly fragrant blossoms. The sweetness of the common Honeysuckle, combined with the subdued odour of orange blossom, is the nearest approach to a description of its fragrance that I can give. One plant of this, however, which I have trained to a South wall affords me thousands of blossoms, and I am assured by the men who make up bouquets, that it is the most useful flower they have for the purpose. This Honeysuckle is admirably adapted for training against a house, and it will do on any aspect but the North.—*W. I. in the Florist and Fruitist for January.*

[We think such of our readers as are fond of flowers, and few will confess that they are not, will be glad to know that plants of this valuable Honeysuckle can be procured from the establishment of the enterprizing firm of Messrs. John Feast & Son, in Lexington Street, Baltimore, who have imported this variety from England with many rare plants, and have propagated it extensively.]—*Eds.*

AGRICULTURAL FAIRS, FOR 1859.

California,.....	Sept.	27, to continue 10 days.
Canada West, at Kingston,....	Sept.	27, 28, 29, 30
Illinois, at Freeport,.....	Sept.	5, 6, 7, 8, 9
Indiana, at New Albany,.....	Sept.	26, 27, 28, 29, 30 & Oct. 1
Maine,.....	Sept.	13, 14, 15, 16, 17
Michigan,.....	Oct.	4, 5, 6
New-Jersey,.....	Sept.	13, 14, 15, 16
New-York, at Albany,.....	Oct.	4, 5, 6, 7
Ohio, at Zanesville,.....	Sept.	20, 21, 22, 23
Vermont, at Burlington,.....	Sept.	13, 14, 15, 16

DESTRUCTION OF THE HORN BLOWER.

We again call the attention of Tobacco planters to the valuable suggestion of Col. Hughes, of Anne Arundel county, in our February number, with reference to the destruction of Tobacco worms. A simple, practical, and efficient preventive of the worm is presented by Mr. Shepherd of the same county, as it has been practised by himself and a few neighbours, and estimated to have been worth hundreds of dollars to them in the preservation of their crops from the worm. This remedy, however valuable in itself, can be of little consequence if only practised by isolated planters.

The suggestion of Col. Hughes is, that local associations be formed in the several election districts of the Tobacco counties, for the purpose of procuring and distributing the poison, and to urge concert of action in applying it. To be effective, an early movement should be made in the matter; a prompt and general attention to it, may result in the extermination of this plague of the planter. It is hardly necessary to urge the importance of heeding this suggestion. The experience of every man interested in it, and the enormous waste of time devoted to the destruction of the worm, even where it is possible to save the crop at all, we should think quite sufficient to prompt the adoption of so easy and practicable a mode of getting rid of the evil.

LAND SALES.

MARYLAND.

Alleghany Co.—The remainder of the Real Estate of A. Hogmire, consisting of 184½ a., has been sold by the Trustees of the said Hogmire to Jonas Spielman, for $50 per a. *Baltimore Co.*—A tract of land on the road leading from Catonsville to Franklintown, in Baltimore county. It contains 5¼ a. land, is improved by a two-story frame dwelling and necessary out houses, and was purchased by Joseph A. Thomas, for $1,600. *Carroll Co.*—Mr. George Orendorff, his farm 100 a., at private sale, to Messrs. Brooke & Coates, of Baltimore, at $100 per a. The farm is located about two miles from Westmnister. *Cecil Co.*—Mr. Thos. Grubb, has bought from Mr. Henry Wesley, 220 a., in the Eighth District, for $5,000. The land was bought seven years ago by Mr. W. for $1,500; there has been no lime or improvement put on it since, and the price it brings now shows the rapid increase in value of Real Estate in this county. George Earle, Esq., Trustee, sold two small parcels of the T. S. Thomas estate; one of 37¼ a., to Col. J. C. Groome, at $8.00 per a., and one of 3 a., to E. W. Thomas, Esq., for $11.50 an a. *Dorchester Co.*—The farm of Dr. Wm. B. Lecompte, was sold by the Trustees to Mr. John Muir, for $9,046. It contains 400 a. *Frederick Co.*—Charles Johnson, Esq., sold at private sale, his "Bloomsbury" farm, in Urbana district, containing 119¼ a., to Messrs. E. L. Windsor & Bros., for $3,330.60. Mr. Joseph Bruchey sold at private sale his little farm of 30 a., 3 miles N. E. of Middletown, to John Summers, Esq., for $1,150. L. Vanfossen, auctioneer on account of Messrs B. T. Johnson and G. K. Shelman, trustees, a farm near Warwick, 158 a., at $50.25 per a., to Mrs. Elizabeth McPherson. Allen Paine, Esq., has sold his farm called "Howard's Paradise," near Liberty, 441 a., for $25,000, to Wm. Hobbs, Esq.; Farm adjoining Fred'k, 183 a. improved part of "Prospect Hill," to G. W. Smith, Esq., at $85.65 per a. *Prince George Co.*—R. B. B. Chew, Esq., Trustee, sold at public sale the Mt. Calvert estate of the late Capt. Brooke, about four miles from Marlboro', 940 a., together with an excellent mansion house and a large number of out buildings. It was purchased by Samuel H. Berry, Esq., for $45.86 per a. The "Brooke Hill" farm belonging to the same estate was sold by C. C. Magruder, Esq, as Trustee, for the sum of $52.25 per a. It contains 320 acres of upland and 60 acres of marsh, and was purchased by R. B. B. Chew, Esq. Edward W. Belt, Esq, Trustee, sold at public sale, on the premises, the real estate of Zadoc C. Cheeley, deceased, consisting of one hundred and thirty-one a.; it was purchased by William P. Pumphrey, Esq., at $25 per a.

DELAWARE.

Kent Co—George Vickers and R. Hynson, Esqs., Trustees for the sale of the Appleton lands, sold in Chestertown, about 442 a., for $12,565. Lot No. 4,157 a., and occupied by Mr. W. T. Appleton, was sold to Mr. W. M. Vandegrift for $29.50 per a. Lot No. 2, 179 a., to Mr. Wm. Loire, of Delaware, for $28 per a. Lot No. 3, of 7 a., to Mr. J. A. Harper, for $60 per a. Lot No. 1, of 6. a., to Mr. W. P. Francis, for $25 per a. Lot No. 6, 23 a, to Mr. W. T. Skirvin, for $16.25 per a.. Lot No.5, 59 a., to Mr. Peter Stokes for $22 per a.

VIRGINIA.

Berkeley Co.—Dr. Richard McSherry, has sold his farm, of some 200 a., lying near Martinsburg, to A. Vanmetre for forty dollars per a. This is one of the finest farms in Berkeley Co. *Chesterfield Co.* The desirable farm of 85 a., 2¼ miles from Petersburg, was purchased by Mr. Edward Bishop, at $15.12½ per a.—total $1,285.42½. *Albemarle Co.*—Mr. Monroe Kelly's farm, some 3 miles South of Charlottesville, 522 a., was sold at auction, to Dr. George M. Bowen, at $32.55 per a. *Fairfax Co.*—The tract of land occupied by Mr. Thatcher Perkins, called "Mount Pleasant," about 150 a., on which there is a commodious frame dwelling, was sold at public auction, to J. J. Wheat, for $41 per a. *Loudon Co.*—The farm belonging to the late Dr. Nathan Janney, near the Goose Creek Meeting House, 27½ a. was sold to Wm. J. &. Thomas R. Smith, for $63.50 per a. *Norfolk Co.*—The farm known as Scotland, sold some short time since by J. G. Pollard Auctioneer, to Wm. W. Silvester, for $15,299—was sold lately by Mr. Silvester to D. McDonnel Lindsey of N. C., for $21,000.

KENTUCKY.

Shelby Co.—Recently Mrs. Jane Howell, sold to John T. Howell 150 a. of her land at $45 per a. It is some five miles west from Shelbyville. Joseph G. Thompson, has sold his farm, some six miles north from Shelbyville, to Gen. R. Doak, at $48 per a. Master Commissioner Shackleford, sold under decree of Court the land of Pleasant Corn, deceased, some six miles northwest from Shelbyville, at $56.51 per a.

PENNSYLVANIA.

Buck's Co.—Joshua Stackhouse, the farm he re-

cently bought of the executors of Joseph Burton, dec'd, 50 a., in Bristol twn'p., to Goforth Allen, for $100 per a. Jonathan Price, about 34 a. of his farm in Wrightstown, without buildings, to Henry Pearson and Giles Gordon, for $60 per a. A farm of 89 a., in Buckingham, sold as the property of Isaiah Bird, to James Magennis, of Plumstead, for $5,925. A tract of 31 a. of land, in Springfield, sold as the property of John Smith, to Jacob Mese, for $550. *Chester Co.*—The heirs of Jacob Good in West Fallowfield, 110 a., to B. L. Wood, at $60 per a.—no buildings. Thos. Wood, 35 a., in West Fallowfield, at $40 per a., unimproved, to J. Kennan. D. Pearce, 15 a. Newlin, to Mrs. Hoopes, for $1100.25. J. Sellers, of Israel Sellers, in Pocopson, 17 a., without improvements, $75 per a. Jos. Ash, Jr., 40 a., with improvements, of G. H. Mitchell, in West Brandywine, at $100 per a. *Lancaster Co.*—John Cooke, of Little Britain twn'p., his farm adjoining the Chester county line, to John M. Wright, at $45½ per a. The farm contained 114 a.

FINE STOCK FOR OREGON.—On Friday of last week John P. Welsh, Esq., left in the steamer Moses Taylor, with the following list of stock, destined for his extensive breeding farm in Oregon. So valuable an assortment has never before been purchased for that country, and we hope Mr. Welsh will succeed in landing them safely at home:

Mary Chilton, by Imp. Glencoe, out of Birdcatcher's dam by Eclipse, grandam Queen Mary by Bertrand—Brimmer—Woodpecker's dam by Buzzard—Fawn by Craig's Alfred—Moreton's Traveller—Imp. Whittington. Brimmer (sometimes called Blue Beard) was by Lamplighter, &c

Short-horn calf Grand Admiral, by Imp. Grand Turk, out of Imp. Agnes, bred by Samuel Thorne, of Dutchess County, N. Y.

South down Buck No. 220 3 years old, bred by Jonas Webb, and imported by Mr. Thomas Batts.

Hampshire Buck, 2 years old, bred by Lord Portsmouth.

Two Southdown lambs, bred by R. A. Alexandeo, Esq., of Woodburn, Woodford County, Ky.

Three New Oxfordshire lambs, bred by John T. Andrew, of West Cornwall, Conn.

One Shepherd Bitch.—*Spirit of the Times Ap.* 16.

[An engraving of "*Mary Chilton*," accompanied by a letter from Mr. Welsh, descriptive of her points and pedigree, will be found in the March No. of this Magazine.—EDS.]

HUNGARIAN GRAPE CUTTINGS.

We are indebted to Dr. W. A. Boyce, of Newburg, N. Y., for a bundle of nine grape cuttings lately imported by Mr. John Kolber, a Hungarian residing in New York. The bundle coniained 9 varieties of grape,—one cutting from each sort,—and are from vines grown in Hungary. These cuttings, together with a very large invoice of others of the same varieties of grape, were sent out on the order of Mr. Kolber, by his brothers residing at Pesth, and at Buda, and, according to Mr. Kolber, embrace the following kinds, viz:

Silver White—Grape is sweet and very juicy, skin very thin, size of medium Isabella.

Red, Yellow and White Muscatel—Skin very thin, very juicy, seeds few and small, almost transparent, (white quite so,) size above medium Isabella.

Blue Katarka—Sweet, little more fleshy than the above, approaches the Isabella, but much more juicy.

Kecske Csocs (Goat Teats)—Sweet and juicy, keeps through winter and spring without difficulty, shape long oval, 1¼ by 1½ inch.

Tokay—The king of grapes, the sweet juice of which renders the best wine of Hungary or Europe, flourishes on mountain side, and approaching winter compels the gathering of rich clusters of berries; size small Isabella.

White Honey—A small, delicious grape, skin very delicate, transparent, extra sweet and ripens very early, from hills about Buda, whence also Blue Katarka, differing slightly from the Katarka or Pesth.

Messrs. E. Whitman & Co., of Exchange Place, Baltimore, have received a considerable number of bundles of these cuttings for sale, from the importer.

DEEP PLOUGHING.

It has been truly said that an increase of one inch in the average depth of ploughing throughout the United States, would produce a larger amount of profit, as compared with present results, than all the gold received from California. We believe in this assertion; but we do not believe that all soils without being previously sub-soiled are fit for this immediate increase in depth. We know that even clay sub-soils, which approach within a few inches of the surface, after being thoroughly sub-soiled, become so ameliorated as to be capable of admixture with the immediate surface-soil; and we are equally well aware that sub-soiling cannot be performed with any profit in clay sub-soils containing excessive amounts of water; that such soils must first be underdrained before sub-soiling can be pursued with profit, as well as that sub-soiling must precede an increase of depth in surface ploughing. But there are millions of acres capable of being ploughed to double the depth to which they have ever received an incision from a tool of any kind, with increased profit. Even in the State of New York there are thousands of acres at this time, which have never been ploughed to a greater depth than four inches, composed of a loam entirely ready to be disintregated by a surface ploughing to the depth of twelve or fifteen inches with increased profit; and there are few soils that may not be at once ploughed to an inch or more beyond the former depth. The adage "that many farmers own another farm immediately under that which they now cultivate," cannot be too often repeated, and the judicious farmer whose will has been so often quoted, as having informed his sons that he had buried a sum of money at a depth of twelve inches somewhere on his farm, and that they must find it, improved the quality of their products by the disturbance of the soil more than he would have benefitted them by the supposed legacy by direct bequeathment. Less manure will produce a larger amount of crops in a deeply disintegrated soil; and it is not true that the deeper you plough the more manure you require. It is true that the more thoroughly manure is divided, the greater will be the amount of crops produced; and this is more certainly brought about by deep than by shallow ploughing.

No practical farmer can doubt that in deeply

ploughed soils, crops are less annoyed by drouth and by insects; and if ploughing is useful at all, it must be useful precisely in the ratio to the amount of soil disturbed, provided that roots are capable of appropriating a greater amount of soil by its disturbance. Who doubts that roots will travel to the depth of twelve or fifteen inches, or even double that distance? Who doubts that lime passing down through the soil will rest inert on the surface of a cold and undisintegrated subsoil? Who does not know that many farms supposed to be worn out have been revived by the increase of a few inches in the depth of ploughing? And who will longer be contented to use a pitiful one-horse plough, skating it through the soil like a harrow with one tooth, and starving on the continually decreasing product.—*Working Farmer.*

SPRING WORK.

Spring is upon us. The great struggle is about to commence. What the hands find to do, should now be done with all the might. But the hands, unless directed by a wise head, work in vain. It is not he who labours the hardest who accomplishes the most. Many a hard working farmer spends half his strength for naught. A little thought will save many a hard and useless day's work. Many an intelligent farmer's boy, seeing how little good results from the hard toil of his father, becomes disgu-ted with farming and resolves to seek some easier method of getting a living, not being able to see that the difficulty is in want of proper management. First determine on the object to be gained, then decide on the best possible means to accomplish the end, and the labour will be easy. Every movement will be one step towards the desired result; its effect will be seen and encourage to continued exertion. Nothing is more discouraging than labouring without an object. Every farm labourer, and particularly the boys, should be told not only how work is to be done, but the object of doing it thus.

What shall be done about *Growing Food for Stock?* Did we wish to keep or fatten a large number of cattle on a small farm, and make the most of their manure, we would cut their green feed to a greater extent at least, and also endeavor to grow some plant for dry feed in the winter that would produce more than either Timothy or Clover. A gentleman stated during a discussion at the last New York State Fair, that he had grown Western corn for fodder, and produced at the rate of twenty tons to the acre when cured. Taking one-half this amount as an average yield, what an amount of winter feed for stock could be grown on five acres. If to this was added an acre or two of *carrots* or *parsnips*, or perhaps an acre of each, how much more stock could be kept on a small farm than in the usual way of growing a ton or a ton-and-a-half of Timothy and Clover, and thirty or forty bushels of corn. Two hundred bushels of carrots are equal in nutrition to 1¼ tons of hay, so that 600 bushels of carrots, which is not a large crop, is equal to 4½ tons. *Hungarian Grass* is said to produce six or more tons to the acre of the most nutritive food on new prairie soil, but we have no idea that such crops could be grown here. In deciding *what is to be done* the present spring, it will be well to consider the best means of growing a large amount of feed for stock, for we are satisfied that, under present circumstances, stock-growing and fattening is one of the most profitable employments in which the farmer can engage. We look for improvement in American farming mainly in this direction.—*Rural N. Yorker.*

CATTLE BREEDERS' ASSOCIATION.

In accordance with a call recently issued, and noticed in the *Rural*, a convention of Cattle Breeders was held at Hartford, Ct., on the 5th inst. The Convention consisted of 43 members only, of whom all were from Connecticut, except eleven from Massachusetts, one from New York, and one from Vermont. After organizing temporally and transacting some business, a constitution for a permanent organization under the title of "The Association of Breeders of Thorough-bred Neat Stock" was submitted, very generally signed by members, and the following officers elected:—*President*—John T. Norton, Farmington, Ct. *Vice-Presidents*—Paoli Lathrop, So. Hadley, Mass., (Short-horns); Lemuel Hurlburt, Winchester Centre, Ct., (Devons); John Brooks, Jr., Princeton, Mass., (Ayrshires); Thos. Motley, Jr., Jamaica Plains, Mass., (Alderneys); Ambrose Bowen, Medina, N. Y., (Herefords). *Secretary and Treasurer*—Henry A. Cyer, Hartford. The permanent organization being completed, reports were made by committees, some discussion had, and various resolutions adopted—but we find little of general interest in the proceedings. A Committee on Pedigree, was appointed, and directed to present a scale of points for each of the several classes of thorough-bred neat stock. Among other things it was resolved "that we deem no animal to be thorough-bred, that cannot be traced by record in direct line, on the side of both sire and dam, to animals in Great Britain of undoubted purity of blood." The Association also resolved to "discountenance the practice of fattening breeding animals for the purpose of exhibition," and that "it is inexpedient for Agricultural Societies to offer premiums for *Grade* bulls." The next annual meeting of the Association is to be held at Springfield, Mass., on the first Wednesday in March, 1860.—*Rural New Yorker.*

THE CORN GRUB.

The corn crop has several formidable enemies to contend with, and among them is the grub which sometimes literally destroys whole fields, and frequently damages the crop seriously. One of the best and most judicious remedies—perhaps the very best ever suggested—is the application of *salt* as soon as the plant makes its appearance above ground, prepared and used in this way: Take one part common salt and three parts plaster or gypsum, and apply about a tablespoonfull *around* each hill, and it will be found to be a sure protection. The mixture should not come in contact with the young plants, as it may destroy them. This method has been tried over and over again by some of the best farmers of Pennsylvania, Delaware and Jersey, and when properly applied, has never failed to be perfectly successful. We hope our farmers, who have reason to fear the depredations of the grub, this season, will try this mixture, leaving a few alternate rows of corn without the salt, and communicate to us the result.—*Germantown Telegraph.*

Fair Grounds at Richmond, Va.—The "Hermitage" tract on the western suburbs of the city, and immediately upon the line of the Richmond, Fredericksburg and Potomac R. R. have been selected by the Virginia Central Agricultural Society for their future exhibitions.

RIPENING WINES.

[From the London Correspondence of the "Spirit of the Times."]

It has been frequently observed that wine ripens more readily on the coast that it does inland.—It has been conjectured that this effect arises from the influence of the sea air, a small quantity of which enters the bottles in the process of corking. A similar result happens to wine carried sea voyages; this has been attributed to the continual shaking of the bottles. But if that were the reason, why should the same result happen to wine stored in cellars by the sea-side? In considering this point the methods adopted by the wine-makers for ripening their wines may be noticed. At Madeira, to hasten the ripening of wine, they cover the bottles with horse dung. A similar method is practised in the Cote d'Or, and in the department of Saone et Loire. M. Vergnette Lanotte, a wine-maker in the Cote d'Or, tried in 1848 a method precisely the reverse. He congealed instead of heating his wine, and it is said, with success. M. Kruger proposes two methods, one similar to that of the vine growers of Madeira, and which was the practice of the ancients, that is heating the cellar by means of pipes; and the other suspending in the heated cellar plates of iron over the exposed surface of the wine. The iron, he contends, when in a state of oxydation, extracts the oxygen from the wine and produces maturity more speedily. M. Odart de la Dorée, the author of the "Manual du Vigneron," and of the "Ampelographie Universelle," indicates a process older and still more rational, which is to heat the bottles. The ancients, we know, were careful to heat their amphoras. He advises us simply to heat the bottles, taking the precaution not to fill them quite full, to prevent their bursting. They are next to be placed in an oven some hours after the bread has been withdrawn, and left there from twelve to twenty hours. They are then taken out, filled up, recorked, and the operation is complete. The wines, it is said, will speedily attain maturity. This process appears to be the simplest and best of all.

NEW ADVERTISEMENTS.

Brewster L. C.—Buckeye Reaper and Mower (Aultman & Miller's Patent.)

Brockenbrough, J. M.—Farm on Totuskey creek, Richmond county, Va.

Goode, S.—Hot Springs 20 miles from Millboro, Virginia Central R. R.

Dingee, W. W.—Pelton's Horse Power, and Thresher—Railway Power and Thresher.

Dixier, Wm. R.—Farm in Virginia.

"*Exchange*" Newspaper—Daily—Weekly—Monthly.

Hartsook, D. I.—1280 acres of land, 40 negroes and mills for sale on the J. R. & K. canal 100 miles above Richmond, Va.

Hussey, Obed—Mowing and Reaping Machine.

Jett, W. N.—Farm in Westmoreland county, Va.

Kinnier, Alex.—Farm near Lynchburg, Va.

McHenry, J. H.—Suffolk Pigs.

Owens, W. H.—Farmers and Planter's Agency.

Patterson & Murguiondo—Esmeralda Guano.

Plater, John R.—General Commission Merchant.

Porter & Ervin—The *Healing Springs*, Bath Co. Va.

Poe & Howard—Sash, Doors, Frames, Blinds, &c.

Ray, B. F.—Reaper & Mower.

Routt, A. P.—Patent Drain Plough.

Robinson, Wm.—Manipulated Guano.

S. Sands—Excelsior Manipulated Guano, and General Agency.

Thompson & Ondeslugs—Water Pipes—Iron, cast and wrought, English composition, Lead—Hydraulic Cement, Fire Bricks, Fire Proof Safes, Cauldrons, &c.

Thorburn, J. M.—Agricultural and Garden seeds.

Thorburn, J. M.—American Cabbage Seed.

Washington, John A.—Estate on the Potomac River, Virginia, for sale.

Whitman, E. & Co.—Horse Powers, Threshers, Horse Rakes, Grain Cradles.—Wire Fences, &c. The Celebrated Hubbard Squash.

Ward, J. R. & Bro.—Furniture and Chairs.

Willis, S.—Lumber, Shingles and Laths.

Yale, T. B. & Co.—Fruit and Ornamental Trees.

Yeomans, T. G.—Fruit Preserving Bottles.

BALTIMORE MARKETS, April 23d.

We have no material change to note in the Grain and Flour Market. The crop of growing grain presents a promising appearance, and especial pains is already taken to make the most of it, in the papers. It is very well to bear in mind, that last year we had the greatest crop of straw ever grown in the country, and for the quantity sown, the poorest crop of grain.

The Tobacco Market is dull; the crop has come in freely, and much of it of indifferent quality.

Wheat.—We quote reds at $1.30 to $1.50 for ordinary to prime; white $1.50 to $1.65 for ordinary to good, and $1.60 to $1.80 for prime.

Corn.—White corn 78 to 80; yellow 81 to 83.

Oats.—We quote Maryland and Virginia 47 to 52; Pennsylvania 50 to 54 cts.

Rye.—Maryland 82 to 85; Pennsylvania 95 to 97.

Flour.—Howard St. Superfine $6.12½; Ohio do. $6.00; Howard St. Extra $7.00; Ohio Extra $6.62½; Baltimore ground Family Flour $9.00; Extra $8.

Tobacco.—Tobacco is coming in finely, but prices do not seem to be settled. They indicate a falling off of 50 cts. to $1.00 from the Fall sales. We quote Inferior at $3.00 to $4.50; Superior $6.00 to $10.00. *Bay Tobacco*, Tips $4.50 to $5.50; Seconds $5.50 to $7; Spangled $7 to $12; fine Yellow $12 to $16. *Ohio Tobacco*, common Green $5.00; common Spangled $6.50; common to middling Red Spangled $7.50 to $9; good to fine Yellow $10 to $15; *Kentucky* $5.00 to $5.50 for Lugs; 7.50 to $8.50 for medium leaf, and $9.00 to $12.00 for wrappers.

Cotton.—We quote cotton at 10 to 14.

Seeds.—Prime Clover Seed, retail, $6.50; Timothy $2.25; Orchard Grass $1.50; Herds Grass $1.25; Field Peas $1.50; Flaxseed $1.50.

Wool.—Unwashed, 23 to 26 cts., tub washed 33 to 36; No. 1 pulled, 29 to 32; Merino pulled, 33 to 34; quarter to half blood, 37 to 39; half to three-quarters 39 to 46; three-quarter to full blood, 46 to 50; Extra, 52 to 54, (all washed.)

Cattle, Sheep and Hogs.—We quote Beeves at $4 to $5.25, averaging $4.87½ on the hoof. Hogs, $8.50 to $9.25, nett. per hundred pounds. Sheep $4.75 to $6 per hundred.

Guano.—Peruvian Guano is selling at $63.50, delivered on vessels.

Best Brown Mexican (AA) we quote at $24.00 in bbls; White Mexican (A), ground $30.00. The lower grades of Mexican from $15 to $20. Elida, or California Guano $48 per ton of 2.000 lbs.—Manipulated Guano $47. Superphosphates $40 to $45 per ton of 2.000 lbs

OUR ADVERTISING PAGES.

The extraordinary press of new advertising matter, making, in all, some sixty pages of extra sheets, will cause a day or two's delay in the issue of the Farmer. It will be mailed, however, in time for the great mass of our subscribers to receive it by the close of the first week of the month. Next month we shall go to press a week earlier, to guard against delays, and hope to have the June number reach its destination by the first day of the month. We ask the especial attention of our readers to the various matters of interest presented in our advertising sheets. Our other matter, it will be seen, occupies full thirty-two pages.

Our own Prospectus of a new volume is crowded out of our pages, and will be sent in a separate sheet. We beg for it the special attention of every reader.

We have received from our friends, Messrs. Capron & Gwyn, Commission Merchants, who have a large and growing custom in Virginia, some stems of the Boughton Wheat, grown on the farm of C. F. M. Bayliss, Esq. on the Rappahannock, which was taken from the field on the 25th of April, in full head and bloom, and four feet in height. It will, we suppose, be fit for the scythe the last week in May. It is hard to estimate the value of a good wheat which will ripen two weeks earlier than our usual harvest. We very much hope that this Boughton Wheat may realize, in all respects, the anticipations of its friends. Its early quality is undoubted.

Labels that Endure.—Nurserymen find it necessary to label trees and plants. A correspondent of the *Field* gives the following recipe for making ink that is indellible, used on zinc labels: "Take 1 drachm of powdered verdigris (acetate of copper); 1 drachm powdered sal ammoniac (muriate of ammonia); half a drachm of lamp-black and 10 drachms of water. Mix the ingredients together in a two-ounce vial and shake it every time before using it afresh, and from time to time while using it. It is ready for use as soon as the verdigris and sal ammoniac are dissolved. In using the indellible ink there is one secret to be attended to, it is this; that the zinc label should, just previously to being written upon, have been rubbed bright with some fine glass paper. I find too that a steal pen is far better than a quill for the operation of writing."—This correspondent has labels he has used three years, and they are as distinct as ever, although use has been hard.

Mahogany Stain.—Take four ounces of red sanders, one pound of fustic and an ounce of logwood, and boil them in half a gallon of water, for one hour, then apply it warm with a brush or sponge; when dry, apply varnish.

Foote, on being scolded by a lady, said: "I have heard of tartar and brimstone; you are the cream of the one and the flower of the other."

SALE OF SHORT HORNS.

Mr. S. C. Ludington, of Greenbrier Co., Va., has sold, (as we learn from an exchange paper) to Mr. A. Rodgers, of the same county, the fine Durham Cattle exhibited by him at the late U. S. Ag. Fair at Richmond in that State. The celebrated bull, D'Jalma, price $2000. This bull received the first premiums, both at the National and State Fairs, and also fourteen first premiums at the State Fairs of Kentucky. Chance, a cow, price $600. She took the first premium at the State Fair, and the second at the National Fair. Red Rose, a cow, price $500. This cow took the second premium at the State Fair, and a certificate of merit at the National. Both of the above named cows, have taken premiums at the State Fairs of Kentucky.—Bertha, a two year old heifer, $400. This heifer took the first premiums of her class, at the National, as well as at the State Fair.

[*From the Fincastle (Va.) Democrat.*]

BOOK-FARMING AND ITS OPPONENTS.

Almost anything will do to tell and believe, till it gets into a book or newspaper, when it is immediately denounced as a Yankee lie or humbug. We have heard some of the tallest yarns from neighbour farmers, about their growing crops of corn, wheat and tobacco, which no one would dispute or profess any doubt of its truth.—But if some one in the company should relate a tale he saw in print, even more probable than that uttered by his boasting neighbours, it would at once be denounced as a romance or humbug.—Why there should be such a prejudice against *printed* accounts of agricultural experiments and their products, we are at a loss to know. If, however, a *printed* account reaches us of a game of Chess, played in London or France, a duel, horse race, dog or prize fight, no doubt is expressed of their truth in every particular, while they furnish subjects for interesting fireside and street-side conversation, till something fresh from the same kitchen, arrives. These thoughts were suggested by reading a number of very interesting articles in the April Number of the "American Farmer," just to hand, and for inspection at our office, but not to lend. In looking over the articles contained in this Magazine, we felt ourself yielding to a wish that we were able to send the work one year, to each of our readers who posseses a farm, however small or large. But our charity and good wishes, all vanished when we remembered—it is nothing but book-farming.—Then our charity condensed itself into the thought of transferring several valuable articles into our columns; but we were again met by the recollection, that it would be said of them: "They are nothing book-farming, so we concluded at the end of this article, to all who would put themselves to the trouble of reading, that the American Farmer can be had in pamphlet form at $1 a year in advance, by addressing N. B. Worthington & Co., Carroll Hall, Baltimore. And that it contains advertisements of valuable agricultural implements; grass seeds of the best varieties; Spring and Summer garden seed; Phosphatic guanos; mowing and reaping machines; anti-freezing pumps; and portable bake ovens, with which dinner can be cooked in the fields, where the hands are at work;